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THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

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AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

The Kaiser's Health.

IT is, of course, quite impossible for us in this country to gauge the amount of truth in the rumours concerning the Kaiser's health. For several years past there has been talk of William II. being troubled with an affection of the throat, which was said every now and again to give cause for anxiety. Then there have been suggestions of an affection of the ear; it was even positively stated that an operation had been performed, but nothing definite was ever made public. The fact that both his parents died of malignant disease was sufficient to give colour to the suggestion that any and every minor malady from which he suffered was in reality of a cancerous nature. He is certainly at the age when malignant disease is liable to show itself, and worry and anxiety, which are considered to be contributory causes, can scarcely be absent in his case.

The Emperor Frederick.

SOME of us are old enough to recall the dramatic circumstances surrounding the death of his father, the Emperor Frederick, who undoubtedly died of cancer of the throat. A great deal of feeling was aroused in Prussia, and indeed all over Germany, not only in medical circles, but also in circles political, by the fact that it was an Englishman, Sir Morell Mackenzie, who was given full charge of the case, and remained with the Emperor until the latter's death. This affront to German skill and German knowledge in matters laryngological was attributed to the influence of the Empress Frederick, who was the eldest daughter of Queen Victoria.

Sir Morell Mackenzie.

WHEN he returned home, Mackenzie wrote a book entitled "The Fatal Illness of Frederick the Noble," which created a great sensation. Therein he described the difficulties which were put in his way by the Court and military etiquette, the jealousy of the German physicians and surgeons, the thinly-veiled antagonism of the statesmen from Bismarck downwards, the insolence of the Crown Prince, now William II., and the general atmosphere of distrust and dislike which he and his colleague, Mr. Mark Hovell, were obliged to encounter. By the Emperor and his Consort, however, he was rewarded by the most perfect courtesy, constantly expressed gratitude, and unbounded confidence.

Von Bergmann.

IN the course of the book Mackenzie described a scene which was evidently intended to convey the impression that von Bergmann, who was also in attendance as chief surgeon, visited his illustrious patient on one occasion in a state of intoxication; and a facsimile of the patient's written comment on von Bergmann's behaviour was reproduced. This was considered unjustifiable by the College of Physicians, who thereupon demanded that Mackenzie should resign his membership. This not very tactful intervention was very severely criticised both by the profession, who regarded it as unwarrantable interference, and by the public, who made merry over the "rules of etiquette" which preclude a man in possession of overwhelming evidence to prove his case from producing that evidence in order to rebut outrageous attacks levelled at him by German detractors. I wonder whether the College of Physicians would behave similarly in the face of the present feeling about matters Teutonic.

German Measles.

ON the subject of the title "German Measles," which has been discussed in these columns, a correspondent suggests that the word "German" occasionally means "spurious," *e.g.*, German silver, German tinder. He refers me to the 1852 edition of Hoblyn's "Dictionary of Medical Terms," which, under "German Paste," gives the following, and asks what it was used for. I fear I cannot say. Can any reader enlighten him? "Beat together lbij of pease flour, lbj of blanched sweet almonds, three ounces of fresh butter, the yolks of two fresh eggs, with a little honey and saffron; heat the mass gently and pass it through a sieve, to form it into grains."

Street Noises.

NOT once, but several times, have I declaimed against the selfishness and want of consideration of people who whistle for taxis. This is the only capital in the world where such a thing is allowed, and it is an abominable scandal that it should continue to be tolerated. Here is a

letter recently addressed to the *Times*, which will, I trust, do something to awaken public opinion on the subject. It is signed "Three Wounded Officers": "May I ask you to insert this appeal on behalf of a number of wounded men in private and other hospitals in the West End of London, in the hope that it may stop the selfish whistling for taxicabs that renders rest and sleep almost impossible? During Christmas the whistling, always excessive, has been unbearable. Many charming ladies are doing their utmost to care for us, and the best medical skill in the world is at our disposal, but the brutal and incessant whistling for taxicabs makes many of us wish we had not been sent home for recovery. Some years ago I remember reading in your columns about a prosecution of an unfortunate man for ringing a muffin bell. This occasional and not unpleasant sound is heavenly music compared with the shrieking that goes on intermittently during the day and violently up to and after midnight."

A Remedy.

This evoked the following, from one signing himself "A Bad Sleeper": "There is a very simple remedy for the distraction by town noises. Take a bit of paraffin wax (off a candle if need be) as large as the last joint of the little finger, warm it on the body until quite soft through, and press it into the ear until it touches all round. Not a hundredth of the sound will pass it. I have used this for years without any ill-effects, and it can be pulled out in a second. By all means educate motorists in humanity, but meanwhile save the patient's distraction." Now, apart from the fact that this is a remedy which a large number of people cannot tolerate (it fidgets them almost as much as the noises irritate) it is preposterous that the majority should have to resort to such expedients in order that the insignificant and selfish minority may make day and night hideous by whistling, hooting and klaxoning. The authorities responsible are presumably at Scotland Yard, and an earnest appeal to them should be made to deal with this matter of street noises boldly, comprehensively and quickly.

Dr. Murray Leslie's Action.

Dr. Murray Leslie is much to be congratulated on the outcome of the suit which he brought against Dr. Cassel's Medicine Co. In October last Dr. Murray Leslie delivered a lecture on "War Strain and its Prevention." The rest of the story, according to the *Manchester Evening News*, is as follows:—"It apparently occurred to the defendants that they might utilise this lecture for the purpose of advertising their own medicine or tablets. Accordingly there appeared in some of the provincial papers articles headed "A Doctor on War Strain," which consisted of a more or less accurate report of what Dr. Leslie had said, but which gradually developed into a recommendation of Dr. Cassel's tablets in such a way as to lead the uninitiated to believe that Dr. Murray Leslie had recommended them. The defendants had consented to pay a nominal sum for damages and the costs of the motion. Dr. Leslie, added counsel, was not out for damages." In the present state of the law, I suppose Dr. Murray Leslie was well advised not to "go out for damages," but if ever anyone was entitled to them, he certainly was. In so far as damages can punish, the unauthorised use of a professional man's work for trade purposes ought to be severely punishable. In the existing state of the law, the only thing for a doctor to do is to bring such an action as Dr. Murray Leslie has successfully brought; but while heartily congratulating the latter, I must warn others who may be driven to take the same course that they cannot expect to meet with the same success. The law on the subject appears to be very vague.

Dr. O'Neill's Case.

Another law which is very vague is that which deals with drugs under the Insurance Act. In the case which is reported in some detail in another column, in which Dr. Bernard O'Neill sought an injunction to restrain the Middlesex Insurance Committee from surcharging him with £323 on acount of alleged extravagance in prescribing expensive drugs, the judgment unfortunately was against Dr. O'Neill. Mr. Justice Rowlatt, who tried the case, seemed to think that, although the law was on their side, the Insurance Committee had not, to say the least, treated Dr. O'Neill very generously. It is obviously impossible for anyone but a supervising medical man to say what constitutes extravagance in prescribing. It is no pleasure to a doctor to prescribe an expensive drug or an expensive line of treatment; when he does this it is obviously for the sole reason that he believes it preferable to any other. In this instance it cannot even be suggested that the expensive drug or treatment puts money in his pocket. The case proves all too conclusively that it may do the reverse.

Wives of Warriors.

W. H. M. writes: "I am interested in your remarks concerning medical attendance on wives of soldiers. In these parts we decided to give free attendance to those who were worse off during the war, and the applicants were to be investigated by a ladies' committee. But the investigation has proved to be a mere formality, for every applicant gets an order. If she is not accepted by us there is a row, sometimes an awful row, and we are sworn at. A further result is that the wives and children come to us more readily than heretofore, and those who were insured drop their insurances. I agree that much of this kind of thing is our own fault, but I see not how it can be altered. The profession can never be got into line; a well-to-do or short-sighted or popularity-seeking practitioner will always spoil a combined effort."

Sir T. W. Parkinson.

Of the two members of the profession who figure as Knights Bachelor in the New Year's Honours List, one is a Scotsman and the other a Welshman. Dr. Thomas Wright Parkinson is, I believe, a native of Dundee. He graduated M.B., C.M.Edinburgh in 1890, and took his M.D. nine years later. He has now been in general practice in Belgravia for many years, and counts among his patients a great number of very

distinguished people. It is to be supposed that it was his services to the Prime Minister during the recent indisposition of the latter which gained him the honour upon which his many friends in the profession will unite in congratulating him. Not very many general practitioners attain to titular distinction. In this case it falls upon a thoroughly worthy recipient.

Sir Milsom Rees

MR. MILSOM REES is a Bart's man who took his double qualification in 1889, and the F.R.C.S. in 1892. He is already a C.V.O. He has now for some years been laryngologist to the King's Household and to Queen Alexandra. Mr. Milsom Rees is one of the few instances of men who have taken high place in the profession without the advantage of a hospital appointment. Mr. Milsom Rees is above all a laryngeal therapist, and it is as such that he has deservedly made a great reputation. In addition to his purely professional distinctions he is a first-class golfer, a very agreeable companion and a good raconteur.

Dr. George Oliver.

DR. GEORGE OLIVER, formerly of Harrogate, who has just died at Farnham at the age of 74, was not only a very successful spa physician, but also a very serious worker in physiological medicine. In association with Professor Schaefer he did some notable work on blood pressure, and did much by precept and example to encourage the use of the manometer as a routine procedure. It was in the course of their work on blood pressure that these two observers stumbled upon some facts in connection with the suprarenals and other ductless glands which opened the door to a good deal of our latter-day knowledge of the subject. Oliver was a very painstaking and accurate investigator on typically sound English lines; he lacked the imagination and enthusiasm which mark, make and not infrequently mar the work of the Celt. His face was very familiar in medical gatherings up to about ten years ago, when he returned to Farnham to enjoy his well-earned leisure.

The Insurance Act.

WE shall publish next week the third and last article by "Delta" on "The Insurance Act in Being." These three articles have dealt with the present position of the Act and its workings in a very impartial spirit; they breathe an atmosphere of inside knowledge and are written with that pleasing under-current of humour which only a certain detachment can lend. "I will be calm, Sir, I will be calm," said Mr. Podgers, and foamed at the mouth, is the note which "Delta" seems to strike, and I strongly recommend his wit and wisdom to readers of the paper. The canvassing of the profession for war purposes seems likely to introduce a new complication into the working of the Act, for, as the *Times* says, it is difficult to see how the medical profession can be effectively canvassed without changes in the panel system.

The Panel System.

THE working of the panel system has come in for a good deal of abuse, some of which is merited, but much of which is due to defects which are inherent in the system itself, defects which could not be overcome even by Heaven-sent administrators. Whether there be a workable substitute for the panel system is a question which might very profitably be considered in the light of the present crisis. One of the chief complaints against the present working of the system so far as the medical officers are concerned is the necessity for clerking; time and temper are constantly being wasted on useless certificates for quite trivial ailments, and doctors do not love clerking. Another very serious matter from our point of view is the expenditure which the Act entails upon the community. Mr. Kingsley Wood has stated that the cost for the current year will be 25 millions, of which the State pays but seven millions. Administration accounts for $3\frac{1}{2}$ millions.

SINAPIS.

THE TREATMENT OF WOUNDS.

IN addition to the unsatisfactory manner in which the organisation of the profession for war purposes is being conducted, there is another matter to which we desire to direct the attention of the War Office. It is that Sir Almroth Wright's views upon the proper treatment of wounds in war, entirely iconoclastic as they are, have been accepted without demur or investigation by the military medical authorities. Now, we yield to no one in our admiration of Sir Almroth Wright, and we gratefully acknowledge the excellent work he has done in many directions, but we do not forget that, being human, he is liable to err, nor do we fail to recall that he has on at least one occasion expressed himself on a matter of personal hygiene in a sense which did not enhance his reputation as a scientist. This matter of the proper treatment of wounds is at the moment probably the most important question in the whole field of scientific medicine. Sir Almroth Wright's views on the subject are very unorthodox; they run counter to the experience and teaching of two generations of surgeons; their application has not been productive of any results which justify the complete *volte-face* which they entail, and, most important of all, their scientific correctness is strenuously denied by independent workers of the highest credit and renown. Dr. Shaw-Mackenzie's original papers published in the MEDICAL PRESS AND CIRCULAR have conclusively shown that Wright's views are unsound, both in theory and practice, and the letter from a medical officer at the front which we published last week clearly shows that so far from being useless in the firing line, antiseptics are essential. It is sound advice which bids us beware of changing horses while crossing a stream. The particular stream which the country is at present engaged in negotiating is the broadest and roughest and deepest which could well be imagined, and yet it is during such a transit, at the bidding of one man, eminent in bacteriology, but not in surgery, and still less in hygiene, without any preliminary soundings and without testing the girths, that we are attempting to pass from one animal to the other. If the only result of failure in this case were to be the plunging of the theorist into the water, some views on the subject of baths might undergo modification, which would be all to the good. But it is not the theorist who risks a bath, but the wounded man who risks his limb and

possibly his life by this sudden revolution in surgical practice, and before it is sanctioned and stereotyped the whole matter should be considered, investigated and reported upon. Dr. Shaw-Mackenzie has very clearly stated his objections to Wright's views, and has supported these objections in language which is all the more convincing because of its studious moderation. There is no doubt that he would be able to repeat his experiments and enforce his arguments by further demonstrations before any properly constituted tribunal. Such a tribunal should be appointed without any delay. And it should not be a committee of the British Medical Association.

CURRENT TOPICS.

The Jubilee of Amalgamation.

THE present number of the MEDICAL PRESS AND CIRCULAR forms a landmark in the history of the two journals. Fifty years ago Dr. Jacob, of Dublin, and Dr. Yearsley, of London, men eminent in the profession in their respective spheres, conceived the idea of fusing the two then existing journals, the Medical Press and the Medical Circular into one, under the title of the MEDICAL PRESS AND CIRCULAR. Each continued his own editorial work, the former being assisted by his brilliant son, Dr. Archibald Hamilton Jacob, while the general management of the combined journal was entrusted to Mr. A. A. Tindall. All but the latter, who still comes up smiling in his 75th year, have long since gone over to the majority, but the editorial work is still carried on simultaneously in London and Dublin, and the two divisions of the United Kingdom are represented in editorial, proprietary and office conditions as they were half a century ago. This is probably unique in journalism, and we doubt not our numerous readers will recognise the fact that the paper is as independent and vigorous in its pronouncements, as impartial in its criticism, and as determined in its opposition to shams and abuses within the profession, and in its assertion of the rights and privileges of its members when assailed by interested parties outside its portals, as of yore. If we may venture to accept as a compliment the many letters of appreciation that have reached us of late, and the number of new subscribers who have honoured us with their support for 1916, we may "go on our way rejoicing" in the fervent hope and desire that our readers may experience the really happy New Year for which all are so earnestly longing.

Tuberculosis and Municipal Economy.

THE sudden check in the rising tide of municipal expenditure which the war has imposed will doubtless lead to various drastic changes. Like other cities, Edinburgh has at present to scrutinise ways and means more closely than in the past, and the report by the City Chamberlain on possible reductions in the city's expenditure suggests that the sanatorium treatment of phthisis patients is one of the directions in which thrift may have to be practised. Prior to the introduction of the National Insurance Act the policy of treating advanced, dangerous cases of phthisis was adopted at an annual cost of about £5,000 per annum. Since the Act was passed the Town Council arranged to give sanatorium treatment to insured persons, and subsequently it extended its hospital accommodation in order to take in all cases whether insured or not. Then it took over the Victoria Hospital and its annexa, and in order to do the whole thing thoroughly became responsible for the treatment of parish cases also. Thus there are now available 231 beds in the fever hospital, and there will be in addition, after the war, 97 at the Victoria Hospital —say 330, with a large dispensary and farm colony as opposed to about 30 a few years ago. The cost now amounts to £19,000 per annum, part of which, of course, is borne by the Insurance Committee and the Treasury. It is not suggested that it will be possible to save any of the expenditure, but the City Chamberlain, acting on the opinion of his expert medical advisers, questions whether it is not to a large extent wasted, keeping in view the object aimed at, namely, the eradication of the disease. Is it not conceivable that in the absence of other preventive methods a large portion of the money spent on sanatorium treatment is simply wasted, and might be better applied in improving housing conditions? And so say many of us. It is one of the most melancholy aspects of the war that a mere fraction of our annual expenditure on distruction would have gone far to settle for ever the housing of the people of these islands.

1916.

THE year of our Lord one thousand nine hundred and fifteen passes, with a high wind crying out of a darkened heaven. But beyond, for the true children of Earth lie the days of crocus and strengthening light. With humanity it is otherwise. From the face of Europe goes up an inarticulate cry of violence of growing intensity with the new year, for the end is not yet; and the lords of life must awhile bring one another to confusion and death. Yet, if the running months reach on to the spring, so also may the new year bring humanity again to the true heritage of peace. The times call for courage, and as much equanimity as can be summoned, not alone upon the battlefield, but at home. Much is heard of the almost unbearable strain upon the combatants, but there is little mention of the inexpressible depression experienced by those not engaged in warfare. The spectre is continually with them; nor have they the same opportunities for forgetfulness as those engaged in the actual prosecution of battle. It is our hope that next January Europe may have outlived her ordeal; that she may come to the realisation of fraternity and forbearance; that the word civilisation may attain to a deeper and a truer significance; that the failing limbs of organised religion may be revitalised by the simple charity of the Son of Man.

The Medical Curriculum.

WE have not been sparing, in time past, of criticism of the medical curriculum as we know it in these countries. We have pointed out its faults both of omission and of commission, and we have hoped for a careful consideration of the whole

problem of medical education. It is a problem, however, which will require careful, deliberate, and courageous consideration. Unfortunately, the changes produced by the war are forcing discussion forward at a singularly inopportune moment. We understand that certain licensing bodies are considering, not so much a reform of the course of study, as some means to circumvent the regulation of the General Medical Council commanding five years' professional study. We sincerely trust that no change may be made at the present. We do not believe in reforms made in haste or in panic, and we believe that few of those whose duty it will be to consider the question can bring a cool mind to the task at present. We admit that there is a possibility of a relative shortage of medical men in a few years' time, but we do not know that the shortage will really be as great as some people think. At any rate, the worst way to meet such a position is to lower the standard of professional efficiency, and almost any change in professional education made at present will be in this direction.

The Insufficient Grant.

Many hospitals, in receipt of subsidy from the Government authorities, are fast becoming crippled from the financial point of view, while at the same time, being in receipt of Government grants, they do not attract the charitable public. Such endowment, although possibly sufficient at the original period of its allocation, is now very much the reverse, owing alike to the increased expense of an improved *technique*, and to the birth and growth of departments not dreamed of at an earlier date. Originally, the cost of a patient probably approximated nearly to the cost of his keep. In the present day, the calling in of the assistance of the expert specialists, each with his own expensive apparatus, together with the enormous increase in efficiency and expense of a modern operating department, reduces the original stipend to a fleabite. An institution, possibly at one time composed of a few visiting physicians and surgeons, and a much less differentiated nursing staff than at present, must now provide a complete X-ray installation, a complete pathological department, with efficient gynæcological, aural, ophthalmic, and dermatological departments. The inference is obvious. With a grant fixed, say, one hundred years ago, a hospital must either live within its economical limits, and rapidly become obsolete, or forge ahead, maintaining its efficiency while drifting deeper and deeper into debt. The problem is no mere figment, and in some cases it is in need of urgent settlement. Unhappily, no more unfortunate time can be chosen for any financial agitation than the present.

Mr. Gilbert Barling, F.R.C.S., was presented on December 22nd with an illuminated address and portrait on his retirement after 35 years on the staff of Birmingham General Hospital. The portrait shows him in the robes of Vice-Chancellor of Birmingham University.

So far 1,100 undergraduates of the University of Toronto have enlisted for military service.

PERSONAL.

NEW YEAR HONOURS.

In the list of New Year Honours, just published, are the following which are of medical interest:—

Knighthood.—George Andreas Berry, Esq., M.B., LL.D., Lazarus Fletcher, F.R.S., Director of the Natural History Department of the British Museum since 1909; Thomas Wright Parkinson, Esq., M.D., Milsom Rees, Esq., C.V.O., F.R.C.S.

C.M.G.—Surgeon-General Guy Carleton Jones, Director of Medical Services, Canadian Expeditionary Force.

Indian List.

C.I.E.—John Andrew Turner, Esq., M.D., Executive Health Officer, Bombay Municipality; Suresh Prosad Sarbadhikary, Esq., M.D., medical practitioner, Calcutta; Lieut.-Col. Robert Charles Mac Watt, Indian Medical Service, Chief Medical Officer, Rajputana, and Civil Surgeon, Ajmar.

Knighthood.—Rai Kailash Chandra Basu Bahadur, C.I.E., medical practitioner, Calcutta, and a member of the Municipal Corporation of Calcutta.

Victorian Order.

K.C.V.O.—Surgeon-General Sir Anthony Alfred Bowlby, K.C.M.G., F.R.C.S., Surgeon-in-Ordinary to His Majesty.

M.V.O.—John George Griffiths, Esq., Hon. Secretary, King Edward's Hospital Fund for London; Staff-Surgeon Robert Joseph Willan, R.N.V.R. (dated November 10th, 1915).

Order of the Bath.

C.B.—Military Division: Fleet-Surgeon Arthur Gaskell, R.N. Civil Division: Surgeon-General William Henry Norman, R.N., Temp. Surgeon-Gen. Humphrey Davy Rolleston, M.D., F.R.C.P., R.N.

C.B.—Arthur William James MacFadden, Esq., M.B., Chief Inspector of Foods, Local Government Board.

C.B. (Military Division).—Brt.-Col. William Westropp White, Indian Medical Service.

Order of St. Michael and St. George.

K.C.M.G.—Surgeon-General Sir James Porter, R.N., LL.D., M.D., K.C.B., Honorary Physician to the King; Temporary Surgeon-General Sir William Watson Cheyne, Bart., R.N., M.B., C.B., Honorary Surgeon-in-Ordinary to the King.

Dr. A. H. Huckle and Dr. C. Christopherson have been appointed Justices of the Peace for the borough of Hastings.

Mr. G. M. Trevelyan, Commandant of the 1st British Ambulance Unit for Italy, has been granted, by the King of Italy, the Silver Medal "For Military Valour."

Prof. F. L. Gulland, of Edinburgh has resumed his teaching at the University there, on completion of his term of service as Consulting Physician to the troops and hospitals at Malta.

Col. Sir J. Rose Bradford and Capt. H. Morriston Davies are to introduce a discussion on "Gunshot Wounds of the Chest" at a meeting of the Medical Society of London on January 17th.

Dr. Malcolm A. Macdonald, Surgeon to the Prince of Wales Hospital, Tottenham, who a few months ago was promoted to the rank of captain in the R.A.M.C., has been recommended to receive the French Croix de Guerre (Military Cross) in recognition of his services in attending to the wounded in the firing line in Gallipoli.

CLINICAL LECTURE
ON
PULSATING LIVER.

By LIEUT.-COLONEL SIR ROBERT PHILIP, M.D., F.R.C.P.E.,
Senior Lecturer on Clinical Medicine, University of Edinburgh.

I PROPOSE asking your attention to-day to a subject of considerable clinical interest and rarity—namely, pulsating liver. The affection is, of course, not a primary one, but is referable to precedent circulatory disturbance. The remarkable thing is, that, while the kind of circulatory disturbance which finally leads to its production is common enough, the occurrence of pulsating liver itself is rare.

I am especially anxious to consider with you what are the elements in the circulatory disorder which chiefly contribute to the striking phenomenon in the liver.

In a previous clinical lecture on the subject I had the opportunity of showing the condition in life, and of demonstrating the associated clinical disturbance in relation to the heart and pericardium. To-day, for very sufficient reasons, I propose to approach the subject from the other side, and present to you, first, the organs themselves as removed *post mortem*, and thereafter say something to you as to the clinical phenomena, and finally discuss the bearing of the one on the other. This order has the advantage that you will be able to see for yourselves, severally, the actual anatomical basis on which the clinical phenomena rested.

You will notice especially the large size of the heart—indeed, enormous for a girl of eighteen. The pericardium is completely and firmly adherent to the heart. Notice particularly the relations of the inferior vena cava. The right auricle is much distended, and the commencement of the inferior vena cava still more so. The venous dilatation involves to a remarkable degree the hepatic vein as it joins the vena cava, and the dilatation may be followed as the vein passes into the liver. The liver is much enlarged and presents the aspect of so-called "nutmeg liver" in extreme degree, that is to say, there is evidence of great backward pressure through the hepatic vein. The liver substance is more resistant than usual and the capsule somewhat thickened. Firm, band-like adhesions existed between the anterior surface of the liver and the abdominal wall. You will note on section the increase of fibrous tissue.

If you will keep these points in view, we shall pass to the clinical history of the case.

CLINICAL REPORT.

The patient, æt. 18, a shop-girl, previously a rubber-worker, was admitted to my ward, complaining especially of "swelling of the stomach and breathlessness." These more urgent symptoms had been present for a week or two. The patient had been far from well for some three years.

History.—Three years ago, after a severe wetting, patient got a bad chill, associated with much pain of shoulder-joints and ankles. She was confined to bed for a month, and under treatment, the articular pain passed off quickly. But her condition became aggravated by breathlessness and palpitation, associated latterly with swelling of the legs. The symptoms continuing, she was treated in hospital for three months. She had then two months' convalescence, and thereafter was able to resume work. During 1½ years, she remained pretty fit. Even then, however, unusual exertion brought on breathlessness and palpitation. This gradually became more marked and her strength began to fail again. She got easily tired, unduly restless, and her appetite was lost. About the same time cough developed with some expectoration, and recurrent pains of a stabbing character. These symptoms becoming aggravated, she was admitted to hospital once more.

At that time she was found to be suffering from valvular disease, especially mitral (both stenosis and regurgitation), and dilatation with some hypertrophy of the heart and pericarditis with adhesions. The most conspicuous and interesting phenomenon was the extreme degree of pulsation of the much enlarged liver. Pulsation, which was general, came and went, never wholly disappearing and becoming much aggravated on exertion or excitement. She remained in the infirmary for some four months, during which time there was recurrent evidence of rheumatic involvement of several joints (knees, elbows, ankles and small joints of fingers).

On discharge she was reported to be both feeling and looking well, with no symptoms of her previous illness, save some breathlessness on exertion. She remained pretty well, doing light work as a shop-girl for another year. Then she began to notice that her clothes were too tight and that her stomach felt swollen. At the same time there was an increase of breathlessness, and cough, with some frothy expectoration, developed. On account of these symptoms she was re-admitted to the Royal Infirmary.

Previous Illnesses.—Of previous illnesses, we may note especially bronchitis as an infant, measles about six years of age, chorea at ten years of age, scarlet fever at twelve years, and pleurisy at sixteen years of age. There was nothing important in the family history so far as could be determined.

General Surroundings and Habits.—The patient worked in a rubber factory, where the air was very close and contaminated with various vapours. In relation to this work she frequently felt giddy and suffered from headache. Subsequent to the second exacerbation, she changed her occupation and became a shop-girl, so as to have better air. Her meals seem to have been good and were taken regularly. She took little tea, no alcohol, and did not smoke.

Condition on Admission.—The patient was of slight figure and poor muscularity. There was a considerable amount of cyanosis, the lips, ears and nails being conspicuously blue. The fingers were not clubbed. The abdomen was evidently distended. There was no œdema of feet or legs. The face was pallid and sallow with a bluish tinge. Dyspnœa was conspicuous. The patient was most comfortable when half-seated, inclining towards the left side. On lying flat the breathlessness was much increased. The temperature was normal.

CIRCULATORY SYSTEM.

Dyspnœa and cyanosis, as already noted, were marked. There was considerable palpitation, becoming aggravated on exertion or excitement, occasional pain over the heart region and slight cough. There was no expectoration. The pulse, 92 per minute, was small and irregular in time and force. The vessel wall was not thickened. The diastolic pressure was conspicuously low.

On inspection, the precordia bulged markedly. There was a diffuse, tumultuous pulsation from base of heart to apex, extending beyond the normal precordial region into the left axilla and epigastric region. The pulsation consisted of a systolic indrawing of the surface, followed by a diastolic rebound. The apical limit of pulsation lay in the 6th interspace in the anterior axillary line, 5½ in. to the left of the mid-sternum. The superficial veins on the right side of the neck and over the epigastric region were somewhat distended and pulsation was sometimes determinable.

Palpation confirmed inspection as regards the form of the precordia and the heaving, tumultuous, diffuse impulse with systolic retraction and diastolic rebound. The ultimate apex beat, as already fixed, was forcible and accompanied by a distinct thrill, presystolic in time. More slight pulsation was determinable to the right of the sternum in the 2nd, 3rd, and 4th interspaces, and slight pulsation also at the root of the neck. In the epigastric region and right hypochondriac region there was pronounced diffuse pulsation. The liver was felt to be much enlarged, and pulsation, which was expansile, seemed chiefly resident in that organ.

Percussion showed a great increase of dulness, the right border of the heart extending 3 in. to the right of mid-sternum, and to the left 5½ in. from mid-sternal line.

Auscultation revealed in the mitral area a loud, blowing murmur, systolic in time, propagated widely towards the axilla and scapula. There was also a pre-systolic murmur. In the aortic area the first sound was roughened, the murmur being propagated only slightly upwards. The second sound was replaced by a blowing murmur, propagated down the sternum. In the pulmonary area an imperfect first sound was heard accompanied by a blowing murmur. The second sound was accentuated. In the tricuspid area the first sound was replaced by a long blowing murmur. The second sound was heard, accompanied by a short, blowing murmur (presumably the aortic murmur referred to).

ALIMENTARY SYSTEM.

The patient's appetite was poor. Apart from this there was little evidence of disturbance or of indigestion in the ordinary sense. The bowels were regular, although diarrhœa had been present previous to admission. There was no jaundice.

The abdomen, as a whole, seemed distended, the swelling being most marked in the hepatic region, where also pulsation was conspicuous.

Palpation showed the liver to be very large, readily outlined, moving freely with respiration, and the seat of extensive expansile pulsation. The lower border in the mammillary line reached to the level of the umbilicus, that is, some 3 in. below the costal margin. The surface was uniform and smooth. There was no tenderness on pressure. In the left hypochondrium the lower border of the spleen was just palpable on full inspiration. A slight degree of fluctuation was determinable in the abdomen generally.

Percussion showed the presence of fluid in the abdominal cavity and increase in the dimensions of the liver and spleen, as already indicated.

Respiratory System.—Apart from the pronounced breathlessness and slight cough already referred to, there were no symptoms. On inspection and palpation the thorax was found to be of poor form with considerable transverse indrawing at the lower part, and some complemental bulging in the upper part anteriorly. Respiratory movements were slight. Some degree of systolic indrawing was determinable on the left side in the 10th and 11th interspaces, posteriorly and laterally. Respirations numbered 24. The chest was poorly clothed, the pectoral muscles and mammæ being especially wasted. Myotatic irritability was considerably increased.

Percussion revealed some slight impairment of resonance here and there from apex to base, more particularly on the right side above. Impaired resonance was definite at both bases, especially the left.

On auscultation, respiration was largely masked by accompaniments, both rhonchi and crepitations, coarse and medium, being widely distributed over the chest.

Hæmopoietic System.—Some enlarged glands were traceable in the cervical region but not of any size. The blood showed R.B.C.'s 4,171,600; W.B.C.'s 10,800 per c.mm.; and Hb. 80 per cent.

Genito-Urinary System.—There was little of special note. A trace of albumin was determinable. Amenorrhœa had been present for two years.

Nervous System.—Patient was a poor sleeper and highly sensitive to all stimuli, but nothing specially abnormal was determined.

Tuberculin-Ophthalmic Test.—In view of the history and aspect of the patient, and certain clinical symptoms and signs, the tuberculin-ophthalmic test was practised, with very positive result—viz., pronounced injection and swelling of palpebral conjunctiva and caruncle, with some fibrinous exudate. The reaction was pronounced.

DIAGNOSIS.

The diagnosis I concluded was that she was suffering from endocarditis and adherent pericardium, secondary to rheumatic fever. The endocardial lesion especially involved the mitral valve, giving rise to mitral obstruction and incompetence. As a result of this there was general venous engorgement, as so commonly occurs. The venous engorgement involved all the viscera more or less and was not extreme. There was little œdema of the extremities.

The liver engorgement was so remarkable as to require special consideration. Mere backward pressure was insufficient to explain everything. The size of the liver and the pulsation seemed to imply a condition referable to the hepatic vein, particularly. The presumption, therefore, was that the hepatic vein was, for some reason, specially influenced by the backward pressure, probably in relation to the adherent pericardium.

Beyond all this a tuberculous element was diagnosed—tuberculosis of glands and perhaps tuberculosis of lung and pleura. The possibility of the pericarditis being of tuberculous nature was also discussed.

PROGNOSIS.

The prognosis was necessarily very grave. This was the third recrudescence of symptoms of severe character, following on an endocardial and pericardial lesion of wide extent in a young, delicate girl. The limits of compensation are unfortunately soon reached in the young heart. This is all the more certain when the young patient, thus prejudiced, has to work for her living.

Progress.

The sequel confirmed the view thus forced upon us. The patient's symptoms improved to some extent under the rest and quiet of the hospital with small tonic doses of digitalis and iodide of potassium. She remained fairly well for six weeks, when, unfortunately, she took influenza, which was rather prevalent in the city and in the hospital. Her temperature, which had been continuously normal for weeks, suddenly ran up to 103°, returning to the normal in three or four days. This was followed by a further irregular rise of temperature for about ten days. Thereafter, although the temperature continued normal throughout, her circulation became further embarrassed. The kidney function was interfered with. The amount of water was reduced and more definite albuminuria established. In spite of all we could do, the patient went gradually down-hill and died four months after admission to hospital.

Post-Mortem Examination.

I have already referred to the leading features and you have seen the important organs. There was some œdema of the lower extremities reaching in less degree to the loins. The abdomen contained a very large amount of serous fluid, bile-stained.

On removing the anterior wall of the thorax, the heart within the pericardium was seen to occupy a much larger area than normal, extending fully 1½ in. to the right of the sternal margin and more than 1 in. beyond the costo-chondral articulations on the left. The areolar tissue of mediastinum was markedly œdematous. The pericardium was firmly adherent to the heart throughout.

The heart showed much dilatation with some degree of hypertrophy, especially of the right ventricle, and to less degree of the left. The mitral valve presented evidence of old endocarditis with adherence of segments at margin. Some recent vegetations were present near the free margin of the segments. The aortic valve presented slight thickening of cusps and some recent fibrinous deposit. The right auricle was much distended and the inferior vena cava greatly dilated, especially for an inch or two, the dilatation involving to a remarkable extent the hepatic vein. The tricuspid valves were thickened and showed recent fibrinous deposit.

The liver was much enlarged and in an extreme degree of venous congestion and showed a diffuse fibrous change throughout its substance.

The spleen was enlarged and congested. The kidneys presented marked chronic congestion and some recent parenchymatous change.

The left lung showed marked thickening of the pleura over the lower lobe, with a considerable amount of interstitial fibrosis. The upper lobe showed some emphysematous change, and there was some increased toughness of lung tissue, apparently from chronic venous congestion. The right lung presented similar appearances. Towards the apex the pleura was a little thickened and here and there were slight depressed cicatricial areas. In both lungs there was thickening of pulmonary artery, vein and bronchi. Mediastinal glands were œdematous, congested and pigmented.

Gastro-intestinal Tract.—There was evidence of chronic venous hyperæmia throughout.

Mesenteric Glands.—Several glands were somewhat enlarged. One gland was about the size of a cherry, hard and cretaceous.

Microscopic examination showed the pericardial adhesions to be of a fibrous nature. No tubercle was discovered in its layers.

Commentary.

The case presents remarkable features in several directions. The chief interest centres in the rare condition of pulsating liver. As illustration of its comparative infrequency, I may say that during a long term of post-graduate experience, I have only seen it some three or four times. It is to be remembered that we are speaking of true, expansile pulsation, not the pulsation communicated from the aorta, or an abdominal aneurysm to an enlarged liver. Still less should it be confused with the movement communicated to the liver from an enlarged (dilated or hypertrophied) right ventricle. The liver, as a whole, dilates and contracts, the pulsation having been compared to that of an accordion.

The interesting condition is caused by the forcible propulsion of the blood backwards into the hepatic vein during each systole of the heart. The physical conditions which render this possible have been sufficiently shown in the organs which you have seen to-day. The extraordinary dilatation of the hepatic vein, both at its commencement and so far as it is possible to follow the vein into the liver, is very striking. An actual ampulla of considerable dimensions has been created at the expense of the liver substance. The blood, collecting in this great reservoir, separated by no valve from the hepatic venous system, is forced back freely with each beat of the heart. The immediate cause of the clinical phenomenon is thus apparent.

Why pulsation of the liver should occur so comparatively infrequently in relation to tricuspid regurgitation, it is more difficult to say. In most cases of simple, tricuspid regurgitation, dependent on mitral or other lesions, the venous stasis is more general. All the organs participate and dropsy of the extremities is more pronounced. In the present instance the superadded factor of adherent pericarditis played an important part.

Some doubt exists as to why the dilatation is so conspicuous in the case of the hepatic veins. It has been suggested that the inflammatory condition which led to the adherent pericardium extends through the vena cava to the commencement of the hepatic vein and that the inflammatory process lowers the resistance of the venous coats, thus admitting of dilatation in presence of pronounced backward pressure. In the present instance there is, as you may have been able to determine for yourselves, no evidence of such inflammatory extension from the pericardium. The lining membranes of the vena cava and the hepatic veins are more or less thickened, but some degree of this is to be expected in the delicate venous structure as a result of the increased pressure.

How are we, then, to explain the dilatation of the hepatic vein? The adherent pericardium opposes considerable difficulty to the free return of blood into the right auricle during diastole, and the blood accumulates at the outlet of the vein, while during systole, owing to incompetence of the tricuspid, the blood is driven forcibly back into the already distended vein. The upper part of the vein is thus strained during both systole and diastole and yields more and more as the strain is continued. The distension occurs in excess at this part for very much the same reason as aneurysm occurs more frequently at the ascending portion of the arch of the aorta—that is to say, at the point where the strain is greatest. The hepatic veins are involved because of their immediate proximity to the commencement of the vena cava, and doubtless also because the liver tissue is a relatively yielding structure which insufficiently supports the distending vein. Once the dam has been established at the outlet of the hepatic vein it is easy to realise

how, with each systole of the heart, in presence of tricuspid incompetence, there is produced a great backward wave throughout the hepatic venous system which registers itself clinically by the striking phenomenon of pulsating liver.

In addition to the pulsation of the liver, another local manifestation of the hepatic disturbance must be kept in view—namely, the ascites. As we have seen, ascites was a prominent symptom, and much in excess of œdematous manifestations in the extremities. The clinical picture recalls in this way that of cirrhosis of the liver, of which ascites is so conspicuous a feature. In keeping with this, the spleen was enlarged in the given case. Because of this clinical resemblance to true cirrhosis, in the absence of pathological identity, the name "hepatic pseudo-cirrhosis" has been suggested for the condition before us. Because of the association of the adherent pericardium, some have suggested "pericardial pseudo-cirrhosis." It is doubtful whether much is to be gained by the introduction of such names. The condition is essentially the expression of the combination of adherent pericardium with backward pressure from tricuspid regurgitation, associated, it may be, as in the present case, with other valvular lesion or advancing dilatation.

With the further progress of cardiac enfeeblement, more general manifestations of venous stasis presented themselves. During the last few weeks of the patient's life, œdema of the extremities, which was slight at first, became more marked and the other viscera, including the kidney, participated in the general venous engorgement. As the more general effects showed themselves, the pulsation of the liver become less conspicuous. The stasis had become general rather than local.

In addition to this extremely interesting hepatic condition, the case before us affords a remarkable illustration of the grave consequences which may accrue from rheumatic fever, more particularly in the young subject. It affords a cogent lesson as to the need for care in the prophylactic and curative treatment of all rheumatic manifestations. There is considerable risk that some of the slighter manifestations of rheumatism are too lightly dealt with, and thereby cardiac disturbance permitted which may never be rectified. I would counsel you in the strongest way to give careful heed to the slightest indication of rheumatism in the growing subject.

There is a further aspect of the case of immense significance—namely, the concomitance within the same individual of two distinct toxic influences. Along with the rheumatic element which was so distinctly registered, both clinically and pathologically, there was also present tuberculosis.

The aspect of the patient, the evidence of some slightly enlarged glands in the cervical region, and certain physical signs in the chest raised the suspicion, and indeed seemed to justify the diagnosis. The view was corroborated by the positive reaction afforded by the tuberculin-ophthalmic test, and was subsequently conclusively confirmed by the determination *post mortem* of several enlarged glands, more particularly the marble-like cretaceous mesenteric gland which you have had an opportunity of seeing. In keeping with this is the thickening of the left pleura, and the presence of interstitial change, more particularly in the left lung, and the delicate, depressed scars to which I have referred at the right apex.

You recall how in the history there is the record of pleurisy when the patient was sixteen. How natural it might seem to assume that the pleurisy thus occurring in conjunction with the rheumatic manifestations was likewise rheumatic in origin. None the less, both clinical experience and pathological results show that this was probably not the case. It is another telling illustration of what I believe to be one of the most important facts in clinical medicine—namely, that a pronounced pleurisy is in the vast majority of cases of tuberculous origin, and is seldom purely rheumatic in nature.

Conversely, the pericardium, as you know, is frequently involved in relation to rheumatism. Both endocardium and pericardium are thus frequently involved. The pericardium is less frequently affected by tubercle, although cases of the kind do occur. The possibility of the adherent pericardium being of tuberculous nature was discussed at our clinique on the patient during life. The greater probability in favour of its rheumatic origin was accepted. Careful histological examination *post mortem* has failed to determine the presence of tubercle in the pericardial structures.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Albert Mouchet, M.D., Surgeon to the Paris Hospitals, Chief Surgeon to the Auxiliary Hospital No. 26, at Orleans. Subject: "Chronic Recurrent Tetanus."*

ORIGINAL PAPERS.

THE USE OF LUTEUM EXTRACT IN THE TREATMENT OF MENSTRUAL DISORDERS.*

BY ADAM P. LEIGHTON, JR., M.D., L.M.DUBLIN.

WHEN one essays to present a dissertation, no matter how brief, on the topic of corpus luteum therapy, it is at least assumed that he possesses some special knowledge of the subject, which, in all probability, is the result of extensive observation or investigation. In this instance, however, such is not the case. I have incorporated herewith little of scientific value or true originality.

A discussion of the time-worn text-book subjects of amenorrhœa, dysmenorrhœa, and other phases of altered menstrual flow, and a consideration of the relation of these symptoms to certain underlying pelvic or constitutional conditions, would be decidedly boresome, hence it is my intention only to offer, in an epitomised form, a few case histories embracing the result of personal experience with the use of luteum extract, combined with a small amount of comment as to the indications for its administration and the limits of its action.

To the corpus luteum is attributed a twofold action: First, of preventing the formation of an excess of scar tissue in the ovary, following follicular rupture and ovular expulsion; and, second, of subsequently elaborating an internal secretion.

As a result of an extensive series of experiments, it has become a well established fact that this internal secretion exercises an important influence upon the sexual cycle, such as causing the phenomenon of menstruation, controlling the nutrition of the uterus and, if pregnancy occurs, probably aiding in the attachment of the ovum to the wall of the uterus by causing the endometrial changes which characterise the decidua. It seems also to influence the physical development of the woman and bears a distinct relationship to the other body glands of internal secretion, thereby aiding in the maintenance of normal metabolism.

Some years ago, acting upon the assumption that the ovary harboured this action, an immense

* Read at the twenty-eighth annual meeting of the American Association of Obstetricians and Gynæcologists at Pittsburg, September, 1915.

amount of interest was taken in the possibility of successfully treating with ovarian extract certain gynæcologic disorders which could be theoretically attributed to hyposecretion of this organ. Little benefit was gained, however, in these cases for the obvious reason that we now know that the ovary, as a whole, did not furnish this active principle.

Following the valuable demonstration of Fraenkel and Loeb, enhanced by the reports from such men as Burnam, Kelly, McDonald, and others, the corpus luteum extract supplanted the ovarian extract in therapeutic use and now we are well agreed as to its efficacy where there are certain given indications.

It chief field of usefulness seems to be, (1) in the treatment of functional amenorrhœa, (2) the neuroses of the natural, artificial and premature menopause and (3) in those cases which come under the head of the so-called "ovarian deficiency" type, occurring during menstrual life.

In this last class, dysmenorrhœa should be especially included. In my own private practice I have observed, in a truly extraordinary manner, the cure or relief of many such cases through the medium of this type of organotherapy. My best results, however, have been gained in the administration of corpus luteum for the relief of the severe nervous symptoms attendant upon the menopause of both the physiological and artificial varieties and the functional amenorrhœa of young women.

As illustrative of the action or corpus luteum in functional amenorrhœa, I have two cases of interest which I should like to describe briefly. The first case is that of a young school girl, aged fifteen, who consulted me in November, 1914. She had first menstruated two years before this time. Six months had elapsed before the next period appeared. She menstruated but three times in the following year and when I first saw her, the history given was of amenorrhœa for a period of nearly four months. Her weight was 196 pounds, and she had gained in weight rapidly during this time. She was very nervous, irritable, and depressed. She had given up school because "it worried her so much." The appetite was good, but she complained of much disturbance of digestion. I commenced treatment by giving her luteum in the dose of 10 grains, three times a day. Three weeks later she menstruated normally. At this time I added thyroid extract in the dosage of five 2-grain tablets a day. She has continued the use of these two extracts up to the present time, with but one short intermission and a slight decrease in the dosage of the luteum extract. When last seen, on the second of this month, after having returned from a stay in the country for the summer, she weighed 167 pounds, a loss of 29 pounds, and has menstruated regularly every five weeks since the treatment was begun. There is absolute cessation of the nervous and digestive symptoms.

The next case is of a similar nature. A young married woman, aged nineteen, consulted me concerning arrangements for her confinement which she anticipated in another month's time. She gave a history of amenorrhea for eight months; during this time she was "sure she felt the motion of the child." On casual inspection she certainly looked the part of a pregnant woman; but upon examination she was found to possess a small infantile uterus and a hypoplastic condition of the genitals. An enormous deposition of fat was evident, especially on the abdomen and in the breasts. The hæmoglobin was about 70 per cent. She was drowsy, asthenic, at times exceedingly nervous, and has experienced violent attacks of tachycardia on several occasions. Blaud's mass by mouth and iron citrate by injection, plus corpus luteum (30 grains a day) was prescribed. Her general and nervous condition gradually improved and menstruation appeared shortly thereafter. I saw this patient regularly for four months. During this period she menstruated four times with fairly normal intervals. I have had no opportunity to see her since.

In these two cases we have conditions of distinct similarity. While it is evident and granted that there was ovarian insufficiency present in both instances, one must consider diminished pituitary function in the second. Here were present the various symptoms which would point to probable hypopituitarism with the resulting progressive general obesity associated with atrophic changes in the genitalia. No doubt, too, there was abnormal secretion of the thyroid which would explain the nervous symptoms. As Bandler states it, "if there is a diminution of the ovarian and thyroid activity and the ovarian activity is so diminished that a relative degree of thyroid hypersecretion exists, we have, in addition to the increase in weight, an excitable condition due to this thyroid hypersecretion."

There is no doubt that some cases of obesity with amenorrhœa are due to ovarian inactivity; some are due to diminished thyroid function; many are of the so-called hypophysis type and, in all probability, many are due to an involvement which includes failure of function in more than one of these glands; as is illustrated in the cases just mentioned.

In the neuroses of the surgical and natural menopause, as I have said before, the corpus luteum therapy plays a most important part. The nervous, digestive and circulatory disturbances of the climacteric may be frequently controlled by its use. Likewise its efficiency in controlling similar symptoms, following hysterectomy and oophorectomy, has been repeatedly demonstrated. I consider it a necessary adjunct to the treatment of such cases.

Two years ago I removed the right tube and ovary from a woman in whom a ruptured tubal pregnancy on the opposite side had occurred a year and a half previously and at which time a salpingectomy and oophorectomy was done on the left side. Shortly after my operation she experienced all the extreme and disagreeable symptoms of the climacteric to such an intense degree that her work, as a dressmaker, was greatly interfered with. No relief was obtained until she began the use of corpus luteum. Thirty grains a day soon brought about complete cessation of the symptoms. She still continues the use of the product in decreased dosage and can dispense with its ingestion for considerable intervals of time without experiencing any immediate return of discomfort.

In the treatment of those patients who, during their menstrual life, show severe nervous phenomena such as irritability, malaise and depression, accompanied by headache and scanty menstruation, corpus luteum is obviously indicated. It is really astonishing to see how quickly there is a change for the better. How often, too, do we see patients who suffer with dysmenorrhœa, presenting this same train of symptoms, indicative of insufficient ovarian function.

This brings me to the subject of dysmenorrhœa. I do want to make mention of my small experience with this condition in relation to my experience with corpus luteum extract as the remedial agent. The results gained by corpus luteum therapy, as applied to dysmenorrhœa, have been far from remarkable, although the reports of some observers show its undisputed value, when utilised in those cases where functional ovarian deficiency is present. I have used it with varied results, but the recital of two

cases of dysmenorrhœa, in which absolute relief was obtained through its use, should have some weight in the consideration of this subject.

The first case was that of a married woman, æt. thirty-two, who had suffered intense pain at her periods ever since menstruation made its appearance. She had never been pregnant. The flow was normal in amount and occurred at regular intervals. I used every method known to me to relieve the condition. I confess that I often resorted to morphine. She experienced this pain only on the first day of the flow. She had an acutely anteflexed uterus with apparent cervical stenosis. I performed a dilatation and posterior division of the cervix, but no relief followed. I tried corpus luteum, giving her one 5-grain tablet three times a day; increasing to two 5-grain tablets three times a day, a week or ten days preceding the period. At first no appreciable relief was observed, but, subsequently, she menstruated almost painlessly. This was in the spring of 1913. I have since received word from this patient, stating that she still uses corpus luteum tablets, and that she has no pain at the time of menstruation. Relief after seventeen years' suffering!

I have a parallel case in a woman, æt. thirty, a semi-invalid, who is thin and poorly nourished. Her menstruation was regular but scanty, and she had always suffered much pain on the first day of menstruation. The pelvic organs are seemingly normal. Fifteen to thirty grains of lutein extract a day has relieved the pain almost entirely, increased the flow and bettered her general condition. These are but two of a dozen such cases which I have in mind, but they are sufficient to illustrate my point.

The fact that dysmenorrhœa is oftentimes amenable to this therapy allows for some interesting theorisation as to its exact mode of action. The ovarian secretion is responsible for menstruation. That is a well-proven fact. We also know that the result of this action is a periodic hyperæmia of the uterus, and thickening of the endometrium followed by diapedesis of erythrocytes, rupture of dilated capillaries and the formation of small hæmatomata; this is again followed by rupture of the subepithelial hæmatomata and exfoliation of small portions of the uterine mucosa. Yet this description does not fully cover the action of the ovarian internal secretion. To illustrate, let us take an analogy from the alimentary system. Inasmuch as we know that the hormone of the duodenum, called secretin, passes through the blood stream to the pancreas and there stimulates the acinar cells to pour out their enzymes, so it is quite possible to believe that the ovarian secretion acts as a hormone in the uterus. In addition to acting as a vasodilator of the uterine capillaries, it has perhaps a further selective action in exciting or stimulating an intracellular or autolytic enzyme in the endometrium, which so softens and digests the histological elements of this tissue that the physiological phenomena, previously described (namely, diapedesis, rupture of hæmatomata and exfoliation of mucous membrane) are made possible and easy, thereby constituting normal menstruation.

Such a theory as this furnishes for me an attractive explanation of some cases of dysmenorrhœa of the so-called congestive or membranous type; for, where the ovarian hormone is altered or lessened, it may fail to excite in sufficient amount the uterine autolytic enzyme with the result that the endometrium, lacking its proper preparation and softening, acts as a barrier to an easy escape of blood; the congested membrane either remains to form a foreign body and set up uterine spasm, or becomes detached in the comparatively large portions that are characteristic of membranous dysmenorrhœa. For this reason, I put forward the suggestion that the cases most suitable for the administration of corpus luteum are those which are characterised by excessive first-day pain, with scanty discharge, suggestive of an intense unrelieved congestion, usually followed later by a free flow and immediate relief of pain.

From my little experience, I am certain that there are cases of dysmenorrhœa in which the main causal factor is deficient action of the natural corpus luteum. I am not carried away with the idea that the therapy of corpus luteum is a "cure-all" in any sense of the word; on the other hand, the cases which may be traced to ovarian deficiency are probably in the distinct minority. One must not allow himself to be so impressed with the ætiological value of some one factor in the cause of disease, that he forgets, or becomes indifferent, to other factors of equal importance.

Surgery is necessarily indicated in those cases where we find pelvic pathological conditions or anatomical abnormalities, which we are wont to consider as the probable causes of dysmenorrhœa. Too often, however, do we resort to operation and, consequently, too often are we disappointed in the results, because the defect is not surgical but glandular. Again more often than one would think, is organotherapy indicated in conjunction with surgical intervention.

There are some serious drawbacks to the use of corpus luteum. It generally has to be used as a routine or continuously to obtain and to maintain results. Its cost hinders its more frequent administration. Its action is not immediate, it is cumulative; for that reason patients, and we ourselves, too often discard its use after a short trial, if it has been unproductive of good results.

As regards its dosage, I find that from 15 to 30 grains a day, seldom more, is sufficient in any case. Its prolonged administration has not brought about any untoward symptoms in my cases; with, perhaps, the possible exception of slight gastric disturbance in one or two instances.

The subject of organotherapy, in its present experimental state, is rather involved and indefinite, and while it is sometimes difficult to recognise and identify the cases which would be benefited by corpus luteum, yet when there is a possibility of "ovarian deficiency" being an ætiological factor in any gynæcological disorder, we owe it to the patient to make use of this remedial agency, for its value is well determined.

THE AMBULANT TREATMENT OF VARICOSE VEINS.

By DOUGLAS H. STEWART, M.D., F.A.C.S.,
New York.

THIS preliminary report may appeal to two classes of readers, viz., the men who always operate and those who never do. The former knows only too well that baffling adverse conditions sometimes ensure failure by such a complete victory over care and skill, that the cases that once gave the fairest sort of advance promises, may belie them in every detail after a lapse of two years. Herein is suggested the possibilities of an after-treatment which will enable one to control emergencies, to correct the beginnings of a post-operative deficiency, to "about face" a progressively poor result, and to convert a threatening disappointment into a happy outcome. Non-operative treatment is successful if it yields a temporary amelioration of annoying symptoms, yet the addition of the aforesaid method may so reinforce it that failure is inconceivable; inasmuch as the non-success of a first injection may be replaced by the fortunate termination of a second or other

attack. In other words, the method may aid a previous operation or may forestall and render unnecessary a proposed radical one, but it will not produce a fault in any after-coming surgical interference.

The literature of intravenous curative injections is prolix and accessible.

Quotations are omitted largely because the writer is such an admirer of the "blue pencil" that he has acquired a habit of skipping medical articles that are overburdened with history. The older methods gave good results in from 70 to 75 per cent. of the patients treated; but from seven to fourteen days in bed was an essential demand. The enlarged, elongated and superficial veins between the knee and the ankle produce changes in the skin, inflammation, and pain, and most severely handicap their owner in his daily labours. These may be cured without absence from business, loss of time in bed, or loss of the services of a hospital bed. The field may be small, but it is neither trifling nor unimportant. The statistician may estimate for himself the loss, in dollars and services, entailed upon our city by labourers, housewives, and shopgirls who are dragging around the ball and chain conditions entailed by diseased veins and their sequelæ. It would, however, take a brilliant political economist to put the facts more forcibly than one poor old coloured woman did, at my clinic. She said: "I went from hospital to hospital for ten years, and once in a while I could do a week's work, and then everything began all over again and slowed me down so that I couldn't move fast enough to cook for the men. I worked round racing stables, where a thousand dollar horse with one bad leg was worth five dollars for his hide and five for his meat to feed the lions in the circus. But my hide had a big hole in it (the ulcer), and I used to wish the law would let my husband sell my carcass for lion's food and end it all. But all I was good for, to anybody, was just something to swear at." She now earns 30 dols. and her expenses per month, with steady employment. Rather a decided difference in one person's share of the "world's work."

Acetic acid will close a vein promptly, but its injection is very painful for from two to five minutes. The vein may die and slough out, but this is really not an alarming matter. The blood vessel is destroyed, that is all, and the end sought for is accomplished, but not in the easiest way.

Shuford's solution has been widely used for years to destroy and remove piles. The idea is not so much to form a blood clot as to produce an adhesion of the wall of the cavity into which it is injected. Perhaps the term soft desiccation describes the process, but slough does not.

Consequently the injection of 5 minims or less of the aforesaid solution, followed immediately by the application of a pressure pad, which forces the walls of the veins in contact, should convert that contact into an adhesion if the pad is held firmly in place, for a week, by a strap of adhesive plaster. Finally, leg, pad and all should be snugly bandaged with one of those webbing affairs and the patient instructed in its application and removal. The pad and adhesive plaster are never to be disturbed by the patient under any circumstances, nor the site of the injection uncovered.

Shuford's solution is borax, acid salicyl. aa. dr. i., acid carbol. dr. iii., glycerin ad. oz. i. The *technique* of its use, while simple, requires such close attention to the minutest detail that it is best to devote another paper solely to that subject. He who interferes with the usual progress of varicose veins, from bad to worse, may be said to be playing with fire and gunpowder; but the writer has a *technique* which, after much experience, has done good work without at the same time giving rise to anxiety.

CERTAIN UNCLASSIFIED FEVERS: THE TYPHACEÆ (TYPHOID GROUP) AND ENTERICOID OR PARA-ENTERIC FEVER.

By RICHARD STEIN, M.D.

Visiting Physician to the Lebanon Hospital, New York.

By unclassified fevers I understand certain forms of infectious fevers which, though frequently met with, and, in part, at least, well known to clinicians in a general way, have not as yet been definitely named. This is due to the fact that often they are passed over as unimportant, and have therefore not been subjected to an exhaustive bacteriological study. Perhaps the main reason why they have not been differentiated is that our present methods of investigation—bacteriological, chemical and otherwise—are not far enough advanced to enable us to classify these fevers nosologically.

The fevers under discussion are primarily caused by infective agents, as distinguished from those fevers which are due to disturbances of the function or of metabolism. This latter group may be designated as the fevers of endogenic origin. Menstrual fever may be cited as an example of this type.*

The fevers under discussion are also distinct from the fevers of exogenic, chemical origin. Finkelstein's resorption fever after sugar installation in infants is an example of this type. What is generally called gastro-intestinal auto-intoxication is a chapter by itself, the import of which is still *sub judice*. If auto-intoxication causes fever at all it is, in a given case, very difficult to state what part, or how much of the fever, is due to the absorption of the toxic products from the surface of the gastro-intestinal tract, and how much is due to the accompanying bacteræmia. What is now popularly called ptomaine poisoning comes under this heading. It is probably nothing more than a gastro-enteritis of bacterial origin. The fevers caused by group A of the paratyphoid bacilli are often accompanied by an acute gastro-enteritis. This is one form of paratyphoid A infection. Both paratyphoid A and B infections, however, may present the complete clinical pictures of typhoid fever. The enteritis of the first form is the result of surface infection. The typhoidal symptoms of the second form are the result of blood-invasion of the paratyphoid bacilli.

Out of a large number of unclassified fevers, I will confine my remarks to a number of those which resemble typhoid fever. Since I have begun to study these cases my attention is not infrequently directed in hospital service toward a form of fever which is brought in because the patient arouses the suspicion of having a typhoid infection. These cases have the general clinical aspect of that disease. In their future course, they may or may not develop into a genuine case of typhoid fever, as the saying goes. More often, they defervesce in a week or ten days. I am not inclined to think that these cases are abortive cases of typhoid fever. In private practice the occurrence of these typhoid-like fevers is a source of anxiety to the family. A positive answer as to the nature of the illness which is demanded for hygienic and prognostic reasons can often not be given.

* *American Medical Journal*, October, 1915.

The course of this fever resembles that of a mild infection ; it comes nearer to the descending curve of the third week of a mild typhoid fever than anything else. Blood cultures are negative. The blood count shows leucopenia or moderate leucocytosis. Eosinophiles are often absent. Relative lymphocytosis may be present or absent. There is no predominating symptom present, pointing to any of the organs. Persistent search for catarrhal symptoms in the respiratory organs is mostly fruitless. In the lack of symptoms—intestinal, respiratory, and otherwise—in the general prostration, the marked enlargement of the spleen—I have palpated the spleen in several instances—in the configuration of the fever curve these fevers strikingly resemble a mild or abortive case of typhoid fever. It must be admitted that these fevers are possibly cases of so-called auto-intoxication. Still, it is difficult to prove them as such, as the decomposition products in the urine, in the shape of the aromatic bodies, scatol, phenol, and indol, are missing.

Judging by analogy, we are dealing here with a mild bacteræmia not unlike a typhoid infection. The infective agent in all probability enters the blood through the portals of the respiratory or intestinal lymphatic system. This can only be proved by positive blood cultures which, so far, have not been realised.

Those of us who practised during the great influenza pandemics of the late eighties and early nineties observed cases of group-infections of influenza in families, some of which strikingly resembled typhoid fever. Since that time I observe every year a number of cases of fever, typhoid-like in character, which go under the name of influenza, but which are not caused by the influenza bacillus of Pfeiffer, as proved by negative sputum culture, in appropriate media, but are due to infection with pne mococci or streptococci. These fevers may start in with catarrhal respiratory signs. If they do not, they are often unmasked late in the disease by resolving into a predominant general bronchitis.

In an interesting contribution by Dr. David Riesman, of Philadelphia, discussed by Dr. Hobart Amory Hare, (1) it is proposed to call the fevers allied to the typhoid fevers, entericoid fevers, febris entericoides. I have called them typhocoid or paraenteric fevers. Presumably these fevers are caused by the bacteria closely allied to the bacillus of Eberth. Since Schottmüller's description of the paratyphoid groups A and B, a dozen or more observers have added distinct varieties of this group which are known by the names of the discoverers. Typhoid-like fevers may also be caused by the paracolon bacilli. Warren Coleman (2) described a case clinically identical with typhoid fever, inclusive of rose spots, caused by a colon bacillus. Schottmüller (3) recently described an epidemic of herpetic fever in women, which was associated with urinary symptoms. The pus in the (oral) labial herpes contained a pure culture of a colon bacillus.

Some one has said that Escherich's discovery of the colon bacillus was hailed as an unwelcome event in bacteriology, as innumerable questions, serological and otherwise, were raised by the seemingly inexhaustible number of strains of the colon bacillus. The answers to most of these questions have so far been unsatisfactory; especially has this been so as regards the subject under discussion. Perhaps some day will be written the biological history of the ascendency of the colon bacillus into the fixed types of the various forms of typhoid fever.

It might not unjustly be said that the foregoing observations on the interpretation of these unclassified fevers have, after all, only a theoretical or at most a purely scientific significance, were it not for the fact that in a number of instances I have seen mild fevers of this kind, after a short subsidence, merge into severe cases of typhoid fever. Now there can be no doubt that in these instances these initial febrile movements which are seemingly identical with the entericoid or para-enteric fevers described above, constitute the introductory stage of true typhoid fever. We must assume that after the usual low temperature fluctuations of the incubation stage of typhoid fever is passed, there is a preliminary or initial fever, in these cases of typhoid fever of a week's, ten days', or fortnight's duration. Sometimes this initial fever is apparently nothing else than a primary access in irregular, atypical forms of typhoid fever. The complete *ensemble* of the case then shows a series of such accesses with remissions. It lies in the nature of the case that the initial stages of typhoid fever have not been subjected to the careful observations of the later stages. In the large number of cases, at least in hospital practice, the patient does not come under observation before the second or third week of the fever, or even later. I have at present a case under observation which presents this initial stage. At that time the patient showed a large spleen with a mild febrile movement. Diazo reaction negative. After a short remission, rapid rise of temperature, spleen larger, diazo strongly positive, blood-culture negative. Numerous rose spots, moderate leucocytosis, eosinophiles constantly present. Widal reaction, taken every few days, absolutely negative. In the sixth week, Widal positive, 1 to 20. It has been negative ever since. Reaction against all available paratyphoid strains negative. Culture of urine and fæces negative. Complement-fixation for typhoid fever negative. The steady increase in hæmoglobin and eosinophiles and the slow but certain reduction in the size of the spleen in this, the eighth week, seems to prove that complete convalescence has already set in.

From what has been stated it becomes evident that the fevers under discussion will bear close study. In a given case, the question to be decided is, Am I dealing with a case of typhoid fever or not ? This is often decided soon enough, when unmistakable clinical evidence is present. The laboratory corroborates the diagnosis sooner or later. If the diagnosis of typhoid fever cannot definitely be made, the situation is a puzzling one. We have seen that there is a class of fevers, clinically resembling typhoid fever, which at present it is hard to classify, and to give a distinctive name. No doubt we are dealing with infections of various kinds. Their true nature will not be determined until they are subjected to an exhaustive biological research.

Furthermore, there is a class of fevers which clinically are unmistakably typhoid fevers, but in which, also, the laboratory proof is inadequate. This opens up the large question of the biology of the typhaceæ. This name has been used by

Loeffler (4) to designate the colon, paracolon, paratyphoid, and typhoid groups of bacteria. The same name, I think, may also be used as a collective appellation for the various groups of fevers caused by these typhoidogenetic bacteria. Typhoid fever, a clinical entity, is produced by a variety of infective agents. Some of these have been determined; their biological reactions are well known. Others are still to be isolated. A comprehensive study of the bacteriological relationships of the typhaceæ fevers among themselves, the determination of the appropriate culture media for each variety of bacteria, the amplification of our knowledge of agglutination, complement-fixation, opsonic index and other biological reactions will serve to classify the individual case in the clinic.

For valuable assistance in the laboratory I am indebted to Drs. Hensel and Garbat.

REFERENCES.

(1) *Jour. Amer. Med. Assoc.*, December 29th, 1913, p. 2205.
(2) *Amer. Jour. Med. Sci.*, 1909, CXXXVIII., 198.
(3) *Beitrage z. Klinik d. Infectionskrankheiten*, vol. i., No. 1.
(4) Fourteenth International Congress for Hygiene and Demography 1907, and Weber and Haendel, Fifteenth International Congress for Hygiene and Demography, 1912.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

QUACKERY AND THE ETHICS OF JOURNALISM.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The system of getting money under false pretences without consideration of the misery which this must involve, and the connivance of owners of great newspapers with this system, seem to me merely manifestations of that debased form of neo-commercialism which imbues so large a section of the world of business. To get money without honestly working for it and to spend it on degrading luxury seem still to form the ideal of many so-called business men. To those men participation in crime for gain is quite laudable, and even to compass a felony is quite legitimate if the stakes are large enough to make it worth while. A truly cunning felony up to date need not land one in a criminal court. It need not lead to punishment—the only thing that can bring shame. If, when arraigned, you can show a flaw in the indictment, or if, after conviction, you can get the sentence quashed on appeal, you may gain—if you have secured the wealth—the admiration of that section to the community who would be willing to follow your example. If you have played the game with astuteness your wealth will give you unlimited power. You may in due course buy for yourself, and not very indirectly, any title you please from a knighthood to a peerage. You may pose as a philanthropist, and take part in moulding national institutions and shaping the destinies of your country. There are plenty of people of this type about; they set a sinister example to men whose moral obliquity needs very little to develop it into criminality. The war is causing all that is best among our people to pass through the cleansing fires of suffering and adversity. The hope must be that on the advent of peace the majority of our citizens will set to work to cleanse their dwelling place of the swarms of vermin and parasites which now infest it. That the people will learn that happiness and peace of mind are not to be got from the pursuit of pleasure and vulgar luxury. They will aim at developing a merry England, but they will strive after creation of merriment which shall come from the heart and not from the teeth outwards. The majority of citizens must be permeated by high ethical ideas, and not be content whilst there exists needless suffering due to man's inhumanity to man. Meanwhile, I feel that the MEDICAL PRESS AND CIRCULAR, although it is probably read by no large a section of the public, is doing a real service by keeping the quackery question to the front. I share with your correspondents their indignation at the persistent misconduct of newspapers with regard to it. My work obliges me to take several leading papers daily. I have been amazed to see the quality of some of the huge advertisements displayed in their pages since the Report of the Select Committee on Patent Medicines, which did away—as is pointed out in your paper—with any excuse for ignorance. You have also pointed out that the Committee strongly urged that not only the sale, but the advertising of a long list of secret remedies should be at once prevented by law. In this list were cures for consumption, and yet in one of the foremost papers of the day now before me there appears a huge advertisement of one of these cures. This one advertisement may have cost anything from £25 to £100. It is no doubt appearing in many papers and catching many victims. The analysis of this precious compound is furnished in official publications with which every newspaper manager is well acquainted. It needs no medical knowledge whatever to recognise the worthlessness of this concoction for any of the purposes for which it is recommended.

I am, Sir, yours truly,
A STUDENT OF SOCIOLOGY.

December 31st, 1915.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Your correspondent Mr. Sewill is probably right when he suggests that lower-class newspapers take their cue from the higher; but from whom do the higher-class papers take their cue? To me it would seem to be from some of the medical journals. I have just thrown into the waste-paper basket an attractive medical periodical to which I cannot subscribe, although invited, because it contains numerous quack advertisements. I have just returned from a visit to the library of an institution which receives most of the medical journals. Out of nine of these, including hospital journals, seven—among them being one leading weekly—contain advertisements to which an adjective much stronger than quack might be justly affixed. Quis custodiet ipsos custodes?

I am, Sir, yours truly,
ANTI-CANT.

January 1st, 1916.

WHO MADE THEE A RULER?

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—At this critical moment your significant proposals for the smoothness and efficiency of a medical Central War Committee must of necessity evoke the most serious and earnest consideration of the community. As you truly insist, the body so intrusted must be of a national and authoritative character, representative of the medical profession, influential, and acceptable to all concerned, and as far as possible inspiring the confidence, respect and obedience of its constituents.

The issue before us is, apparently, as follows:—

(1) Whether the Government should requisition the services of the General Medical Council.

(2) Whether the Government should create a Central War Committee *de novo*.

(3) Whether support can reasonably and properly be accorded to the self-constituted committee of the British Medical Association, on terms and conditions to be decided upon.

As against the General Medical Council it is urged that they have no organisation suitable *ad hoc*, that only four or five members live in London, and that therefore they could not manage an institution requiring constant supervision.

It is, however, worthy of mention that they have the great advantage of a charter and of powers to act upon for the purposes of organisation, etc., and that the accessibility to London is easy and leaves nothing to be desired. But the difficulties, if any, of travelling must also apply to the Council of the British Medical Association. The General Medical Council have earned the good will, the respect and loyalty of the medical profession, and may rely upon Government support.

The British Medical Association has of late had most ample opportunities of showing its methods, its work and its dipiomatic power,and as the outcome has become a discredited body, with, for the time being, "Ichabod" branded upon its portals, and it is doubtful whether its members will tolerate any attempt at rehabilitation at the expense of their funds. Indeed, the Council must be prepared to be surcharged with these extraneous expenses, however zealous their activities may sound. It is registered under the Companies Act, and in the light of the abortive attempt it made a few years ago to obtain a charter, it is not likely to try its luck again before the end of the war.

The British Medical Association is stated to have co-opted representatives of the Royal College of Physicians and the Royal College of Surgeons and the Universities of Oxford, Cambridge and London, but it is not clear what power, either singly or collectively, these members will have, or whether the control will be vested in the Executive of the British Medical Association.

Nothing could be more deplorable at this present crisis than a renewal of the dissensions in the ranks of the medical profession, and for which the British Medical Association has been largely responsible.

I am, Sir, yours truly,

DENNIS VINRACE.

Gower Street, London, W.C.
January 1st, 1916.

SPECIAL CORRESPONDENCE.

FROM OUR OWN CORRESPONDENTS.

SCOTLAND.

SCOTTISH WOMEN DOCTORS IN SERBIA.

A LETTER has now been received from Dr. Elsie Ingli, dated November 5th, telling of the adventures of the Scottish Women's Hospitals which were sent to Serbia earlier in the year. The first hospital to be evacuated as the result of the Serbian retreat was Dr. Macgregor's, which was transferred from Mladanavatz, immediately after the fall of Belgrade, to Kraguievatz, where they organised a huge dressing station and treated over 5,000 cases in a week. Then Kraguievatz also had to be evacuated. Next Dr. Alice Hutchison's hospital had to be moved to Poshega, and when the Austrians crossed the western frontier to Vrenaskavania further east, where she and Dr. and Mrs. Hope have now a small hospital and dressing station. The third of the northern hospitals, at Layaravatz, was the last to be moved, to Krushenyvatz, whence Dr. Inglis's letter is dated. It is not very easy to follow the further movements of the various hospitals and field ambulances, but it is clear from what Dr. Inglis says that she and her co-workers have resolved to stick to their posts and do what they can to alleviate the sufferings of the Serbs. At the time of writing the intention apparently was to concentrate the various units at Novi-Vazar, and thence cross into Montenegro. Dr. Alice Hutchison, who is in charge of one of the hospitals, was, it may be remarked, in charge of a hospital in Bulgaria during the recent Balkan war.

EDINBURGH ROYAL INFIRMARY.

From a short report by Dr. W. B. Blackie on the finances of the Infirmary, the Institution appears to be weathering the difficulties of the present financial situation. Two years ago the managers urged that as it was unlikely that the large legacies they had been accustomed to would continue, an endeavour should be made to raise the ordinary (subscription) income by £10,000, and this year this has been done. During the year 13,102 in-patients have been treated, the daily average being 903. The ordinary income was £46,474, an increase of £10,142, and among incidental donations may be noted the sum of £3,686 resulting from a "flag day." The ordinary expenditure was £60,944, showing a deficit of £14,470, which is better than last year by £9,687. The cost per bed has fallen from £71 to £68. During the year 200 beds have been set apart for naval and military cases, who have been treated free, but in future the Government is to pay for them at the rate of 4s. a day.

SPECIAL REPORTS.

COST OF A PANEL DOCTOR'S PRESCRIPTIONS.

IN the King's Bench Division of the High Court of Justice, on 19th December, Mr. Justice Rowlatt delivered a judgment in the case of O'Neill *v.* County of Middlesex Insurance Committee, which is so important to the profession that we reproduce it here:—

In this action Dr. Bernard O'Neill, who practised at 9, Duke's-avenue, Chiswick, sought an injunction against the Middlesex Insurance Committee to restrain them from surcharging him with £323, or from deducting that sum from the amount payable to him by the defendants under the National Insurance Acts. He also asked for a declaration that the defendants were not entitled so to surcharge him, and that Regulations 40 and 51 of the National Health Insurance (Medical Benefit) Regulations (England) were illegal and *ultra vires*, and of no force and effect.

Mr. Rigby Swift, K.C., and Mr. A. Neilson appeared for the plaintiff; Mr. Clavell Salter, K.C., and Mr. R. A. Wright for the defendants.

The plaintiff, on December 5, 1913, entered into an agreement with the defendants for the medical treatment of insured persons under the Acts of 1911 and 1914, and he had been placed by the defendants on the panel of medical practitioners. By Clause 1 the Acts of 1911 to 1913 and the National Health Insurance (Medical Benefit) Regulations (England), 1913, or other regulations in force in the area of the committee were incorporated in the agreement. The plaintiff was to be paid in accordance with the provisions of Part IV. of the schedule to the regulations on the basis of the rate of 1s. 7½d. a quarter for persons included in his list at the beginning of the quarter entitled to medical benefit.

In March, 1914, a sub-committee, called the joint committee for the checking of prescriptions, was appointed, consisting of two members from the Insurance Committee, two members from the Panel Committee, who were representative of the medical profession, and two members of the Pharmaceutical

Committee, who were representative of the chemists. The plaintiff, on October 23, 1914, was asked to meet that prescription checking sub-committee of the Panel Committee to explain certain prescriptions which seemed excessive and extravagant. The plaintiff attended the meeting and was told that whereas the average cost per prescription for the whole county during the first quarter of 1914 was 9d., the average cost of his prescriptions was 3s. 4d. There was a deficiency in the drug fund of about £7,000 for the year.

After considering the matter the Panel Committee resolved to recommend that the plaintiff be surcharged the sum of £323 2s. 8½d. This report of the Panel Committee was considered by a sub-committee of the defendant committee, who resolved that the excessive demand on the drug fund had arisen because the orders given by the plaintiff had been extravagant, and that the sum of £323 be deducted from the amount payable to him by the committee, and that the amount so deducted be credited to the drug fund.

The defendant committee on March 1, 1915, passed a resolution to surcharge the plaintiff £323 2s. 8½d., and notice of that surcharge was sent to the plaintiff on March 8, 1915.

As the Insurance Commissioners had held in another case that a doctor had the right to be heard before the full Panel Committee, and as the plaintiff had only been heard before a sub-committee of the Panel Committee, the defendants on March 10 told the plaintiff that they had remitted the matter of his surcharge to the Panel Committee for further report.

On March 15, 1915, Dr. Brackenbury, the chairman of the Panel Committee, sent to the clerk of the defendant committee a draft model report prepared by the British Medical Association, and added:—

Of course, it will not be followed too closely in the present case, but I suppose it will give us the necessary outline and some suggestions. If you could get some such report drafted with as much detail included as is possible, and let us have it with such documents as are necessary for our inquiry (those we had on the last occasion, I suppose by Thursday week), I should be greatly obliged.

—meaning the inquiry by the Panel Committee into the plaintiff's case. On March 17 the secretary of the Panel Committee wrote to the plaintiff that his committee were advised that he (the plaintiff) should have an opportunity of appearing before the full Panel Committee with reference to the surcharge and fixing an appointment and setting out the main facts disclosed by an examination of his prescriptions, the first of which was that the average cost of each of his prescriptions was 2s. 4¾d., the average for the whole county for the same period being about one-third of that amount.

The plaintiff's solicitors replied that the Insurance Committee were *functus officio* by reason of their previous decision, and that they had advised the plaintiff not to attend the meeting fixed.

The clerk to the defendant committee replied to Dr. Brackenbury on March 18 that he would let him have a report drafted on the lines suggested in time for the meeting.

The defendant committee on April 12 formally rescinded the resolution of March 1 and referred the report of the Panel Committee back to them for further consideration. The plaintiff was then invited to attend the meeting of the Panel Committee. This he did under protest that the regulations were illegal and *ultra vires*, and that any report or resolution of the committee could not be enforced against him, and he refused to answer any questions or to offer any explanation. The Panel Committee then made their report, which was considered by the General Purposes Sub-committee of the defendants, and on May 3, 1915, the defendant committee resolved to surcharge the plaintiff £323 2s. 8½d.

Regulation 40 of the National Health Insurance (Medical Benefit) Regulations (England), 1913, provided:—

(1) Where it appears to the Panel Committee that by reason of the character or amount of the drugs or appliances ordered for insured persons or by any practitioner or practitioners on the panel the cost of the supply of those drugs and appliances is in excess of what may reasonably be necessary for the adequate treatment of those persons, the Panel Committee may and if any representations to that effect are made to them by the Pharmaceutical Committee, shall make an investigation into the circumstances of the case, whether in respect of the drugs and appliances ordered by an individual practitioner or generally as to the orders given for drugs and appliances by practitioners on the panel.

(2) The Panel Committee shall, after hearing the Pharmaceutical Committee and any practitioner concerned, make a report to the Committee, and if after considering the report the Committee are of opinion that an excessive demand upon the Drug Fund has arisen owing to orders given by a practitioner which are extravagant either in character or in quantity they may, if they think fit, make such deduction from the amount payable to that practitioner by the Committee as they think fit and shall pay the amount so deducted to the credit of the Drug Fund: provided that the practitioner shall be entitled to appeal to the Commissioners, whose decision shall be final.

JUDGMENT.

Mr. Justice Rowlatt, in giving judgment, said that he had no jurisdiction to decide whether the plaintiff had been extravagant or not; all that he had to decide was whether the defendants had the right to surcharge him, and, if they had that right, whether they had exceeded their powers. It was clear that persons who had to discharge judicial functions must discharge them in strict conformity with the terms of the instrument which conferred those powers. In the present case the power to surcharge was conferred by Regulation 40 of the National Health Insurance (Medical Benefit) Regulations, England, 1913. His Lordship read it, and continued: That regulation not only gave the Panel Committee judicial power, but also gave them the power to initiate an investigation, and if the Pharmaceutical Committee made representations to them that any medical practitioner had been extravagant, the Panel Committee was bound to make investigations. In his (his Lordship's) opinion, it was not necessary that every step of that investigation should be attended by the medical practitioner, but he had undoubtedly a right to be heard, and must be given an opportunity of looking into the matters which were being investigated, and of challenging any point which he disputed. In the present case the Panel Committee had their attention drawn to the matter by a sub-committee. They thereupon instructed an expert to look into all the prescriptions. This he did with great minuteness. The matter was then considered by a sub-committee in October, 1914, who heard Dr. O'Neill and reported to the Panel Committee. That sub-committee was the wrong body to hear him; their report, therefore, was not binding. It was said, therefore, that that was an end of the matter. In his Lordship's opinion that was not correct; the proceedings were a nullity and there was no decision, and there had to be a decision, unless the matter was to be allowed to drop.

The matter was then referred back to the Panel Committee, who held a second meeting on April 22, 1915, of which they gave the plaintiff notice. He attended, but refused to answer any questions or give any information. It was true that the com-

mittee had already gone fully into the questions, and had come to a conclusion that the case was rather black against the plaintiff; but that, in his Lordship's opinion, did not render the committee incapable of reopening the question. He could not hold that this second meeting was a pretence. As the plaintiff refused to speak it could not be said that he had not had a full and proper opportunity of being heard.

He then came to the more important point in the case, namely, whether Regulation 40 was *ultra vires*. That depended on the Act. Section 65 of the Act of 1911 gave the Commissioners power to make regulations (*inter alia*) "generally for carrying this part of this Act into effect." It was said on behalf of the plaintiff that this regulation was not within the scheme of the Act at all. Section 8 of the Act laid down the benefits to which insured persons were entitled, and section 15 (5) gave them the right to choose their doctor and provided for the supply of drugs and medicines. In his Lordship's opinion, it did not give the doctor an uncontrolled discretion in the matter. It was obvious that there must be a limit to the amount available, and apart from that it appeared to him that there was a duty imposed upon a doctor to prescribe reasonably. The Act did not, of course, contemplate that the patients were to be stinted, but the doctor was not to be extravagant or reckless in ordering medicines that were unnecessarily expensive. In order to carry out the Act it was necessary to provide some means of checking extravagance, and this rule was made for that purpose. It was consequently a rule which came within the powers conferred on the Commissioners for carrying the Act into effect. There would be judgment for the defendants with costs.

Solicitors.—Mrs. Hempsons for the plaintiff; Messrs. Charles Rogers, Sons, and Abbott for the defendants.

OBITUARY.

DR. EVAN LLOYD, M.B., C.M., J.P., TREGARON.

DR. EVAN LLOYD passed away on December 15th, at the age of 64 years. He was seized with an illness a few years ago, which never entirely left him, and although it was once thought his recovery was complete, the complaint periodically recurred. Born in 1851, the late Dr. Lloyd proceeded to Glasgow as medical student, and there, in 1876, he graduated M.B., B.S. Returning to his native county, he started in practice at Tregaron. He soon built up an extensive practice, and was appointed to the posts of Medical Officer to the Tregaron Workhouse and Medical Officer of Health to the Rural District Council. His annual report to the Council had of late years attracted considerable attention by his efforts to improve the sanitary condition of the district, and in that direction he did successful work. He was appointed a county magistrate in February 1899, and a member of the Cardiganshire County Council in March, 1901. Three years ago he was appointed to succeed the late Dr. Abel Evans as Coroner for Mid-Cardiganshire. He leaves a widow and family of eight.

DR. S. R. DUDLEY, L.M.S.S.A., ILFORD.

THE death of Dr. Samuel Robert Dudley took place at Ilford on December 21st, after a short illness. Educated at St. Bartholomew's Hospital, he qualified L.S.A. in 1901 and L.M.S.S.A. in 1907. The deceased, who was 54 years of age, leaves a widow, but no family.

DR. C. H. FOX, M.D., M.R.C.S., F.R.C.P., EDINBURGH.

THE death took place on Christmas Day, at 35 Heriot Row, Edinburgh, of Dr. Charles Henry Fox. He was aged 78. The deceased gentleman took the degree of M.R.C.S.Eng. in 1850, his M.D. at St. Andrew's and F.R.C.P.Edin in 1900. He was educated at St. George's and Edinburgh. He was formerly Physician to and joint proprietor of the private lunatic asylum, Brislington House, Bristol.

DR. A. F. BLAGDON RICHARDS, M.A., M.D., M.R.C.S., L.R.C.P., SWANSEA.

THE death has taken place, at Swansea, of Dr. A. F. Blagdon Richards, who was connected with Swansea Hospital for some years as a throat and nose specialist. Dr. Richards, who was 51 years of age, belonged to an old Carmarthenshire family, and was educated at Cambridge, qualifying M.D. in 1896. He practised with great success for about 25 years in Swansea, but had a complete breakdown in health some time ago. He leaves a widow and one son.

REVIEWS OF BOOKS.

AIDS TO PHYSIOLOGY. (*a*)

AN important number in the Aids Series is that on Physiology, a new edition of which has recently made its appearance, the two previous editions coming from the pen of Prof. Peyton Beale. This new presentment of the essential facts of physiology has been edited and partly re-written by Dr. John Tait, Lecturer in Experimental Physiology in Edinburgh University, and by Dr. R. A. Krause, and we have read it with pleasure and profit. It is pleasantly written, up to date, and the author's views on matters of controversy are clearly stated. Conflicting opinions are excluded, but in every instance of this kind we are in agreement with the author. We heartily commend the book alike to the student and the practitioner who wishes a bird's-eye view of modern physiology. At the same time there are points which in our judgment call for criticism in view of future editions. Naturally, the most important failing in a work of such small size (250 pp.) is that certain sections are dealt with much too briefly—for instance, those on the pulse, and the spinal cord as a reflex centre. We venture to think that twenty valuable pages might have been saved by referring readers to "Aids to Histology" instead of giving them a mere *résumé* of histology in the present work, thus affording more space for the fuller development of points unnecessarily condensed. We must congratulate the author on a very careful revision of proof; we have not discovered a single misprint, although through some carelessness in revision we are told in one line that the pulse-rate in old age is 60 or less, and almost in the next that the heart's action in extreme old age is quickened. The word "sensory" is frequently used when "afferent" is intended. "Basophil" is spelt "basiphil" wherever it appears. This may be justified on etymological grounds, but is contrary to usage. These, however, are minor points which will doubtless be noted in the next edition.

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ST. THOMAS'S HOSPITAL REPORTS. (*b*)

WE have nothing but praise for the form in which the staff of St. Thomas's Hospital publishes its Annual Report. First comes a statistical statement of the diseases and injuries treated in the medical, surgical, and gynæcological wards, giving particulars as to age and result. This is followed by a critical analysis of the various cases of each disease and the treatment adopted, together with brief notes on the more interesting cases. This part of the book is of the greatest value, and we are filled with admiration,

(*a*) "Aids to Physiology." New edition. By John Tait, M.D., D.Sc.Edin., and Robert A. Krause, M.D., D.Sc., D.P.H.Edin. and Glasg. Pp. 250, with 52 illustrations. London: Bailliere, Tindall and Cox, 1915. Price 3s. 6d. net.

(*b*) "St. Thomas's Hospital Reports." New Series. Edited by Dr. J. J. Perkins and Mr. C. A. Ballance, F.R.C.S. Vol. XL. Pp. xii. and 217. Vol. XLI., pp. xii and 237. London: J. and A. Churchill.

not only for the enormous amount of careful work recorded, but for the industry and skill of the various registrars who have handled such a mass of material so capably. Many points of interest appear in these pages. We are surprised to note that in two cases of typhoid fever in one year the Widal test was negative, although in one of them the typhoid bacillus was recovered in pure culture from the blood. This must be a very unusual experience. We note with interest that a case of pulmonary abscess treated with an autogenous streptococcal serum recovered, whereas one treated surgically died. Ligation of the superior thyroid artery has been practised for Graves' disease, but the results do not appear encouraging. Out of 87 cases of salpingitis and 62 of pyosalpinx and tubo-ovarian abscess, tuberculosis is only noted as being present in two cases. The reports of other gynæcological departments show tuberculosis to be the cause of between 30 and 40 per cent. of the cases of salpingitis and pyosalpinx that come to operation. An instance is mentioned of a six months' pregnancy in a uterus the subject of carcinoma of the cervix. The mortality in eclampsia was very high—six deaths among twelve cases. The information given as to the treatment of eclampsia is silent on the point of feeding. The maternal morbidity in the puerperium is very high—20 per cent. in 1911, and 24.2 per cent. in 1912. No information is given as to the treatment adopted for sepsis. We note that about one-fifth of the morbid cases is classed as "sapræmia," a term which should have disappeared by now from scientific nomenclature. Another one-fifth is classed as "reactionary"! The obstetric reports are the least satisfactory in the volume.

SURGERY. (*a*)

IN these days of competitive publication, when the market is flooded with so many hastily compiled and slovenly written text-books, it is with a sense of genuine pleasure that we turn to a new edition of "Thomson and Miles." These volumes represent the best teaching of the Edinburgh school; the style is fluent and easy, the text is enriched with numerous well-chosen photographs and radiograms, and there is a delightful absence of "padding."

In spite of the difficulty of compressing within the space of two small volumes a complete account of modern surgery, there is little of clinical importance omitted or passed over in these volumes. Descriptions of operative *technique* have been relegated to a third and independent volume; succinct outlines of pathological processes are given wherever necessary; and the authors are to be congratulated upon the successful production of a really good student's text-book of clinical surgery.

The individual sections are so arranged that there is little overlapping; points of differential diagnosis and indications for treatment are clearly summarised: preceding each section is an admirable *résumé* of the chief points of importance in the applied anatomy and physiology of the organs under consideration; and nearly all the sections have been brought up to date by ample reference to more recent work.

In dealing with the problem of surgical shock, the conflicting theories of Crile and of Henderson are both considered. In discussing treatment for the prevention of the condition, we were surprised at the absence of any reference to the intravenous injection of saline or Ringer solutions; nor is there any mention of the occasional good effects produced by the use of pituitrin. We warmly commend the authors' plea for a more extensive application of Bier's hyperæmic treatment in acute inflammations.

The chapter on syphilis is thorough and modern. In considering the treatment of tuberculous disease in bones and joints, the authors recommend a judicious adherence to conservative methods in young subjects, whilst direct operative interference is, in their opinion, more suitably reserved for more adult patients. The authors' method of description of injuries of bones and joints is admirably arranged, each region being taken up in turn, and a clear, concise account rendered of the principal fractures and dislocations which may be met in individual areas; thus, fractures and dislocations in the neighbourhood of the shoulder joint are considered together, and so on. This method of grouping should greatly facilitate the study of these injuries for the student. Clear indications are laid down for operative intervention in fractures where older methods of treatment have failed to yield wholly satisfactory results.

The account of the surgery of the thyroid gland is disappointing. The brief ætiological summary is guiltless of any reference to iodine metabolism; the description of Graves' disease is scanty and hurried; and there is only the most cursory reference to the parathyroids. In the chapter on carcinoma of the breast, we think a more detailed account of Handley's work might have been included with advantage to the student.

Some 250 pages are devoted to abdominal surgery. The early operation for appendicitis is warmly advocated, and the "saccular theory" of hernia formation also obtains the authors' support. The relationship of chronic gastric ulcer to gastric carcinoma is emphasised. The account of intestinal obstruction is clear, and there is a concise description of recent clinical findings on the vexed question of intestinal stasis.

Throughout both volumes (save for the section on the thyroid gland) the authors have striven successfully to render this new edition thoroughly representative of the best modern opinion. Their teaching is in no wise too dogmatic in a field where a too emphatic dogmatism is always dangerous. We can recommend the student who is starting to walk his hospitals no more reliable text-book than this with which to complement his studies at the bedside and in the theatre.

(*a*) "Manual of Surgery." By Alexis Thomson, F.R.C.S.Ed., and Alex Miles, F.R.C.S.Ed. Vols. I. and II. Pp. 801 and 948. Fifth edition, revised and enlarged. London: Henry Frowde, Hodder and Stoughton. 1915.

THE YEAR-BOOK OF PHARMACY. (*a*)

FOR half a century the "Year-Book of Pharmacy" has been of great theoretical and practical value to pharmaceutical chemists, and it has become a valuable book of reference. During the fifty years of its publication, pharmacy has made immense strides forward, and the literature of pharmacy has correspondingly increased; this progress entailed much extra work on the editor of the annual. It is no light task to issue a readable and practically useful summary of the progress of pharmacy in the space at the editor's command. We refer to these things because we think that the annual must either be enlarged or some of its sections be deleted. The section Chemistry consists of condensed abstracts, well chosen and interesting, but too brief to be of practical value to the manufacturer, and too technical to be followed by the great majority of compounding pharmaceutical chemists; and medical practitioners cannot give time to the chemistry of the alkaloids or the study of open and closed chains and the influence of alkyl radical substitutions in modifying physiological action of a drug. "New Remedies and New Applications of Remedies" contains in a few pages a great deal of useful information, especially now, when German synthetic chemicals are unattainable. "Pharmacognocy" gives some interesting abstracts on belladonna, hyoscyamus, and other familiar herbs, which are suffering destructive attacks in the United States from the potato bug. Belladonna, foxglove, henbane, and stramonium grow to great perfection in Ireland, and some effort might be made so to cultivate them that we might be independent of imported supplies. Dispensing naturally occupies a large

(*a*) "Year-Book of Pharmacy, containing Abstracts of Papers relating to Pharmacy, Materia Medica, and Chemistry, contributed to British and Foreign Journals from July 1st, 1914, to June 30th, 1915, with the Transactions of the British Pharmaceutical Conference at the Fifty-Second Annual Meeting, held in London, July 14th, 1915." Editor of the Abstracts, J. O. Braithwaite. Compiler of the New Remedies Section, J. Stephenson, F.R.S.E. Editor of the Transactions, R. R. Bennett, B.Sc., F.I.C. London: J. and A. Churchill, 7, Great Marlborough Street. 1915.

amount of space, and the section well repays reading by those who desire to prescribe active drugs in a palatable form. Revision notes are a series of criticisms on the 1914 Pharmacopœia, some of which are severe and well deserved. "The Presidential Address" is an appeal to the members of the Society to organise a movement for the establishment of a Royal Army Pharmaceutical Corps to look after the pharmacy of the Army. Many excellent arguments are put forward in support of the scheme; but at present so many difficulties beset the Government that there is little prospect of the President's suggestion being carried out.

MEDICAL NEWS IN BRIEF.

Dr. Steevens' Hospital, Dublin—The Steel Memorial.

AN interesting ceremony took place at Dr. Steevens' Hospital, Dubiin, on St. Thomas' Day, December 21st, when his Grace the Lord Archbishop of Dublin, at a special evensong service, dedicated a lectern placed in the chapel of the hospital by the Governors and staff to the memory of Major Edwin Steel, R.A.M.C. When a student, Steel spent several years as a resident pupil in Steevens' Hospital, where the thoroughness of his work and the sterling qualities of his character made for him many warm friends. Steel graduated in Medicine in the University of Dublin in the summer of 1893, and in January, 1895, entered the Royal Army Medical Corps. In the nineteen years that he served in that corps he saw much service. He was for two periods in India, where he specially distinguished himself for his work in connection with the plague, and for which he was made an Associate of the Order of St. John of Jerusalem. He also held the South African war medal and the Durbar medal. When the present war broke out Steel was in command of the hospital at the Higher Barracks, Exeter. In August, 1914, he went to France in command of Field Ambulance No. 20, and for his work with it was mentioned in dispatches by Sir John French. In October, 1914, Steel was appointed Assistant Director of Medical Services with the first Cavalry Division. While on this duty he was, on November 23rd, wounded at La Clytte, by shell fire, and died the same day. The handsome brass lectern in the chapel of his old hospital will form a visible token of the honour in which the memory of Edwin Steel's short but full life is held by some of those who knew him well.

Allen and Hanburys Bi-Centenary.

AT Liverpool Street Hotel, on December 18th last, the employees of Messrs. Allen and Hanburys, Ltd., at home and abroad, presented to the Vice-Chairman, Mr. Frederick Janson Hanbury, his portrait, painted by Mr. Percy Bigland, and a cabinet of silver to his co-director, Mr. W. Ralph Dodd, with illuminated addresses.

Mr. F. W. Gamble (Chairman), in making the presentations, referred to the completion of a period of 200 years since the establishment, in the City of London, of the firm. He stated that the formation of the Plough Court Pharmacy were laid by Silvanus Bevan. William Allen, F.R.S., was a man of the most strenuous activities and of European renown as a scientist and philanthropist. He became the first president of the Pharmaceutical Society on its foundation in 1841, and was one of those named in the Royal Charter of Incorporation granted in 1843. At this time the Plough Court Pharmacy produced another great man, Daniel Hanbury, F.R.S., whose name and work are commemorated by the Hanbury medal, awarded periodically to the most distinguished international worker in pharmacognosy, Daniel Hanbury's favourite subject. To-day the Chairman is Mr. Cornelius Hanbury, who attains next year to his golden jubilee as a partner in the firm.

Mr. Frederick J. Hanbury, in his reply, said that when he first entered the business, it was accommodated in the two old houses, built after the Great Fire of London in Old Plough Court. In the early part of last century most of the anti-slavery meetings were held at Plough Court, where Lord Brougham, Wilberforce, Clarkson and other pioneers of this grand work were constant visitors.

Mr. Dodd said he had never known a time in all his business career when it was so very difficult to carry on the business. He claimed that Allen and Hanburys may take the credit, in no small degree, for the striking improvement in recent years in the statistics of infant mortality, pointing out that the "Allenburys" system of infant feeding is now well established and recognised by the medical profession. It is very widely used, and has been the means of saving many thousands of lives.

The Royal Society of Medicine.

AT the meeting of the Electro-therapeutical Section on January 21st. at 8.30 p.m., a paper will be read by Dr. E. P. Cumberbatch on "The Simpson Light," and he will also give a demonstration of the apparatus.

At the next meeting of the Surgical Section, on Wednesday, February 2nd, 1916, at 5.30 p.m., Dr. Hernaman-Johnson will give a demonstration of the use of condensers in the treatment of nerve lesions, and will read a paper on "The Use of Condensers; and the Diagnosis, Prognosis and Treatment of Nerve Lesions." The demonstration will be of particular interest to neurologists and those practising electro-therapy.

Medical Society of London.

THE next meeting of the Society will be held on Monday, January 17th, when a discussion on "Gunshot Wounds of the Chest" will be introduced by Col. Sir John Rose Bradford, F.R.S., R.A.M.C., and Capt. H. Morriston Davies, R.A.M.C., F.R.C.S., Lieut.-Col. Hale White, M.D., R.A.M.C., and others will take part in the discussion. Fellows and others desirous of taking part in the discussion are requested to communicate with the Hon. Secretaries or the Registrar.

Ninety-Seven Degrees of Frost.

INTENSE cold has prevailed for some weeks over the whole of Scandinavia, resulting in temperatures lower than have ever been registered at this time of year. The degrees of frost Fahrenheit were:—Stockholm, 40; Christiania, 43; Vardö (in Finmark), 72; Jemtland (Swedish Province), 97. The last temperature is the lowest ever observed at any place in Scandinavia.

The King's Inspection of Ambulances — Northern Miners' Gift.

THE KING recently inspected in the grounds of Buckingham Palace 25 fully equipped motor ambulances provided for foreign service by the miners of Lancashire and Cheshire and presented by them to the British Red Cross Society.

The cars form half of a convoy of 50, the other half of which will be presented by the coalowners in the two counties. Those inspected by the King cost about £18,000. The ambulances are specially adapted for hill climbing and the rough work of a campaign. Lord Derby, who recently inspected them, was so much pleased with the convoy that his brother, the Hon. Arthur Stanley, Chairman of the British Red Cross Society, requested the King to inspect the cars before they were sent away.

The ambulances were drawn up in the Mall and driven to the Palace grounds, where His Majesty inspected them, one car being examined in detail. The King expressed his approval of the completeness of the equipment, and also his keen appreciation of the generosity of the miners.

Sir Ernest Cassel's Gift.

SIR ERNEST CASSEL has given £25,000 in War Loan stock to the Joint Committee of the British Red Cross Society and the Order of St. John.

A week ago it was announced that Sir Ernest

Cassel had given £50,000 4½ per cent. War Loan stock to hospitals and kindred charities to be distributed on the same lines as his previous donation of £50,000 in 1911—that is, partly in direct gifts and partly through King Edward's Hospital Fund.

British Hospital Staff as Prisoners.

THE number of members of the British hospital units who have returned from Serbia to London is about 90. They speak of the terrible sufferings of the unhappy Serbians, many of whom, both men and women, lay dead along the sides of the roads followed in the retreat. The British Farmers' unit are, the returned doctors and nurses say, prisoners in the hands of the Austrians, and a similar fate has befallen many members of the staff of the Scottish Women's Hospital. The latter were at Krujevatz when last heard of. The British Red Cross Society announce that all their Montenegrin units under Dr. Clemow have arrived safely in England

Nose Drill.

IN the *New York Medical Record*, Dr. E. Harrison Griffin asserts that more than 75 per cent. of catarrhal cases that come to the attention of physicians are due to the improper use of the handkerchief, and recommends that children in public schools should be instructed in nose drill. Dr. Griffin thus describes the correct method of nose-blowing:—"It is best to take a deep inspiration to fill the chest with air, after a finger is placed upon the side of one nostril to obstruct the passage. With one violent expiration the air from the chest is forced through the open chamber of the nose. This is repeated on the other side of the nose."

Death for Malingering.

A MESSAGE from Paris states that a court-martial sitting at Clermont Ferrand has condemned to death two French soldiers who, on the eve of the battle of Champagne, deceived the doctors into believing they were suffering from abscesses, with the result that they were removed to hospital. It was afterwards discovered that the "abscesses" were artificially produced.

Red Cross Donations.

RESPONDING to an appeal by the Lord Mayor, the Mercers' Company, in addition to previous contributions, have given £500, the Clothworkers' Company £500, the Skinners' Company £105, and the Cutlers' Company £100 to the funds of the British Red Cross Society and the Order of St. John of Jerusalem (Joint War Committee).

Red Cross Work at Malta.

THE British Red Cross Society has received the following telegram from Lord Methuen, under date, December 27th:—"His Excellency the Governor of Malta wishes to express his hearty thanks to the committee and staff of the British Red Cross and Order of St. John for their admirable organisation for the comfort of the men at Christmas. His Excellency witnessed for himself the happiness of the patients in every hospital on Christmas Day from the successful efforts of the committee and those ladies helping under their guidance."

Medical Sickness and Accident Society.

AT the usual meeting of the Committee held last month, Dr. F. J. Alden in the chair, the reports submitted showed that during the month of November the claims for sickness had risen slightly above expectation, but that for the whole year, so far, the total experience is below the total expectation. In spite of the congestion of business generally, owing to the war, it was reported that new proposals received were greater in number than those for the same period in the preceding year. The number of additional proposals received has been fairly well maintained. One satisfactory feature noted was the increase in the combined Sickness and Accident and Life Assurance contracts issued, and the tendency among existing members to avail themselves of the opportunity of increasing their insurances in the Society by the addition of Endowment Life Assurances, payable at the age of 65, or previous death.

The number of claims from members on active service have, fortunately, been few, in comparison with the total number who are serving in the Royal Army Medical Corps and similar forces. The complete figures of this item will probably be included in the Chairman's speech at the next annual general meeting.

University of London—The Reitlinger Prize.

THE Paul Philip Reitlinger Prize, offered in 1915 for the best essay on "The Economic Condition of the People of England in 1815 in Comparison with the Present Day" has been awarded to Herbert Roland Hodges, of the London School of Economics. The prize, this year of the value of £40, was founded with funds given to the University by Mr. Albert Reitlinger in memory of his son, a student of St. George's Hospital Medical School, who died on December 3rd, 1911. Next year the prize will be awarded for the best essay embodying the result of some research work on a medical subject carried out by the candidate.

Federated Malay States Hospital.

A HOSPITAL for soldiers has been established at Blackmore End, Kimpton, Herts, generously lent for the purpose by Mrs. Vincent, of Blackmore End and 35 Portman Square. The funds have been provided by the public of the Federated Malay States, all classes of the community, Malay, Chinese and Indian, as well as European, having contributed liberally. The hospital is under the charge of Captain G. D. Freer, R.A.M.C. (T.), formerly Senior Medical Officer, Selangor, F.M.S.

Typhus among British Prisoners.

MEN from the camp at Wittenberg give a dreadful account of the lack of medical care there, which, they declare, is causing hundreds of deaths from typhus. Nearly a hundred British have died in this way.

Queen's Nurses and War Work.

AT a meeting of the Council of the Queen Victoria's Jubilee Institute for Nurses it was reported that 557 Queen's nurses were away from their districts, as they were undertaking duty in connection with the war; in some instances the associations were working with a smaller staff, and in many cases non-Queen nurses were being employed temporarily.

Oxford University.

THE following candidates have satisfied the examiners for the Diploma in Public Health:

Part I.—Elizabeth F. Butler, James T. MacManus, and Richard H. Vercoe.

Part II.—Edgar B. Argles, Thomas R. Bowen, and Effie G. Brander.

University of London.

THE following candidates have passed the M.D. examination:—Branch I. (Medicine): Abraham S. Erulkar, B.S. Both in Branch IV. (Midwifery and Diseases of Women): Lilias M. Blackett, B.S. (University Medal), Dorothy C. Logan, B.S.

The following have passed the second examination for medical degrees, Part II.:—Oliver St. Leger Champion, George Day, William Eidinow, Walter A. Flynn, Walter H. Grace, Algernon S. Green, Alice M. Griffiths, Blanch A. M. Henderson, Jerusha J. Jhirad, Constance A. Jones, B.Sc., David M. Jones, Daulat M. Lala, Robert L. Portway, Reginald H. Sunderland, Charles H. Warner, B.Sc.

London School of Tropical Medicine.

THE following is a list of candidates who have passed the examination—October to December 1915:—V. A. Goonetilleke (Ceylon Medical Service,

L.R.C.P., L.R.C.S.Edin., L.M.S.Ceylon, M. de Costa, M.R.C.S., L.R.C.P., D.P.H., T. Ryan (West African Medical Service), M.B., B.Ch., B.A.O., E. J. Rowbotham, M.R.C.S., L.R.C.P.Lond., R. J. Tata, L.M. and S.Bombay.

Dublin University.

THE following candidates have passed the Trinity College School of Physic Michaelmas Examinations:—

Preliminary Scientific.—Chemistry: Derrick H. G. Fishbourne, Henry A. Lavelle, John C. J. Callanan, William J. Hogan, Eric W. Harris, George R. L. Jordan, John G. Holmes, Mayo F. Meade, Edward H. Montgomery, Jacobus F. Van Staden, Samuel J. Laverty.

Physics.—Charles W. Parr, Thomas F. L. Cary, George R. L. Jordan.

Botany and Zoology.—John F. Sheppard, Victor G. Walker, Richard D. Murphy, John G. Holmes, Derrick H. G. Fishbourne, Eileen H. Dowse, Patrick J. Healy, Albert V. Foster, Harry C. Dundon, Edward H. Montgomery, Patrick J. Duggan.

Intermediate Medical.—Part I.—Anatomy and Physiology.—Eric J. Lyndon, William F. McConnell, John B. McGranahan, Cecil Keller, William L. Young, Percival A. Dormer, Kenneth Greer, James M. Hill, Thomas Tabuteau, Joseph Posner, Daniel McElwee, Frederick J. Dymoke, Frederick W. Godbey, James A. W. Cullen, Jason G. Bird.

Intermediate Medical.—Part II.—Applied Anatomy and Applied Physiology.—Charles G. Ambrose, Percy C. Parr, Margaret Wolfe, Patrick Casey, William J. Hamilton, John E. Hill, Meta G. Jackson, Frederick J. Dymoke.

Final Medical.—Part I.—Medical Jurisprudence and Hygiene, Materia Medica and Therapeutics and Pathology.—Andrew H. Davidson, William F. Wicht, Philip A. Hall, William Garde-Browne, Joseph G. Bird, Robert W. Prichard, John P. Macnamara, James B. Taylor, Hastings H. Molloy (Pathology, Medical Jurisprudence and Hygiene), Millicent Hamilton-Johnstone (Pathology), Michael C. Dippenaar (Materia Medica, Medical Jurisprudence and Hygiene).

Special Final, Part II.—B.Ch. (Surgery).—Geraldine Murphy, Herbert Mitchell, Cecil McL. West, William F. Wilson, Cecil G. Sherowitz, William B. Walker, Godfrey Bateman, Thomas W. Sweetman, Robert L. Vance, Roland H. Graham, Joseph H. C. Walker, David H. Hall, Grosvenor L. Murphy, William Hunt, Arthur G. Fisher.

Special Final, Part II.—M.B. (Medicine).—Thomas W. Sweetman, Herbert Mitchell, Clara B. M. Adderley, Cecil G. Sherowitz, Edward Mannin, Thomas E. Beatty, Roland H. Graham, William Hunt, Arthur G. Fisher, Maurice B. King.

Special Final, Part II.—B.A.O. (Midwifery and Gynæcology.—John A. C. Kidd, John M. Ryan, Marie A. Hadden, Alan F. Grimbly, Luis Blumberg, Eileen G. Gwynne, Thomas G. Roche, Edwin Boyers, William Hunt.

Final, Part II.—B.Ch. (Surgery).—Thomas W. G. Johnson, George W. Doran, Thomas E. Beatty, Francis W. O'Connor.

Final, Part II.—M.B. (Medicine).—Alan F. Grimbly, Edward Lipman, Frederick J. Murphy, Robert L. Vance, Esther V. Adderley, Marie A. Hadden. David H. Hall, Violet M. Deale, Grosvenor L. Murphy, Francis W. O'Connor.

Final Medical Examination, Part II.—B.A.O. (Midwifery and Gynæcology).—Joseph W. Bigger, Thos. P. Chapman, Robert C. B. Ramsay, Clotilda B. Bevis, Rupert M. B. Gordon, Francis W. O'Connor, William Garde-Browne, Philip A. Hall, Charles L. McDonogh, William L. Bates.

M.D.—Brian D. Crichton, Rev. Ernest E. Lavy.

M.Ch.—Arthur Chance (high marks).

Preliminary Scientific Dental Examination. — Chemistry and Physics.—Irene O. Dorman.

Dental Anatomy.—Francis S. Judd.

Diploma in Public Health, Part I.—Ratan Edulji Dastur.

Diploma in Public Health, Part II.—Ratan Edulji Dastur.

Edinburgh University Graduation.

AT the graduation ceremonial last week Principal Sir William Turner presided, and there was a large attendance. The following degrees were conferred:—

Degree of M.D.—Edwin C. Girling (lieutenant, R.A.M.C.), M.B., Ch.B. (in absentiâ), George D. Logan, M.B., C.M., Stewart M'Naughton, M.B., Ch.B., Adelaide A. Renshaw (née Dreaper), M.B., Ch.B., William Russell (lieutenant, R.A.M.C.), M.B., Ch.B. (in absentiâ), Charles P. Stewart (B.Sc.), M.B., C.M., Vattaparampil Sankara, Vallathan, M.B., Ch.B. (in absentiâ), Griffith J. Williams, M.B., C.M.

Degrees of M.B., Ch.B.—William Brownlee (M.A., B.Sc., New Zealand), Thomas F. Corkill (lieutenant, R.A.M.C.) (S.R.), Henry F. Ferguson, George W. M. Findlay (Surg. Prob., R.N.V.R.), Pratul Kumar Ghosh, Robert L. Impey (lieutenant, R.A.M.C.) (S.R.), Henry B. Kirk, Andrew J. M'Ivor, Premrai Trambakrai Majmundar, Kumud Sankar Ray (M.A., B.Sc.), Arthur J. D. Rowan, Clement I. Stockley, Guy M. Torrance, Reginald A. Warters (B.A.Cantab), James A. Williams, Wyndham Williams (lieutenant, R.A.M.C.) (S.R.), Tin Po Woo (Ng), Margaret K. J. Wright, Peter H. Young.

Degree of D.Sc.—William F. P. M'Lintock, B.Sc.

Degree of M.A.—Pottipati Hanimireddigari Rama Reddi, B.Sc.

Degree of B.Sc. in the Department of Public Health.—James A. Henderson, M.B., Ch.B. (captain, R.A.M.C.) (T.).

Royal College of Surgeons of Edinburgh—The Fellowship.

AT a meeting of the College held on the 15th ult., the following gentlemen, having passed the requisite examinations between 4th and 6th October, 1915, were admitted Fellows:—James Buchanan, M.B., Ch.B.Glasg., — Ruchazio, Shyama P. Chattopadhya, L.R.C.S.E., etc., — Halisahar, P.O.Bengal, Jacobus S. du Toit, M.D.Edin., Arthur O. Evans, M.B., Ch.B.New Zeal., James N. J. Hartley, M.B., Ch.B., Edin., Alfred W. Macbeth, M.D. C.M., Queen's University, Kingston, Ont., Canada, L.R.C.P. and S.

MEDICAL WAR ITEMS.

HIS MAJESTY THE KING has been graciously pleased to confer the Military Cross on the undermentioned officers in recognition of their gallantry and devotion to duty in the field:—

Temporary Captain Henry James Burke, Royal Army Medical Corps (attached 1st/8th Battalion West Yorkshire Regiment, Territorial Force). For conspicuous gallantry on 8th November, 1915, near Turco Farm. A sergeant in the front line had his leg crushed by the blowing in of a dug-out, and Captain Burke found immediate amputation necessary. In order to save time he crawled across the open to get his instruments, while the enemy turned a machine gun on him. In spite of their fire he returned the same way, and coolly performed the operation in the trench while the enemy were shelling it heavily.

Temporary Captain Bartholomew James Hackett, M.B., Royal Army Medical Corps (attached 7th Battalion Suffolk Regiment). For conspicuous gallantry and devotion to duty at Loos on 2nd October, 1915. When the battalion to which he was attached had suffered very heavy casualties and had run out of dressings, Captain Hackett brought up a fresh supply from the dressing station, crossing about 1,000 yards in the open. He has frequently attended the wounded under fire, and has shown great bravery.

Captain John Earnsclough Brydon, M.B., R.A.M.C., who has been wounded in France while attached to the Royal Field Artillery, Northumberland Division Ammunition Column (T.F.), was House Surgeon at the Darlington Hospital before the war, and previously held a similar post at the Bristol Children's Hospital. He took his M.B. degree at Edinburgh in 1908.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

CASPIAN (Appleby).—The news of the offer was received too late for notice in this issue.

J. N. (York).—You will see he has been mentioned in Sir John French's dispatch. He is with a field ambulance.

COLLOID (London).—Others have commented in the same strain.

THE GENERAL'S LOST TEETH.

IN the retreat from Mons a distinguished general now commanding an army in France thought to snatch a few hours in bed in a peasant's cottage. He left his artificial teeth on the washstand. At night he was aroused with the news that the enemy was near, and hurriedly left, forgetting his teeth. After subsisting on light foods for a fortnight, the battle of the Marne brought the general back to the village. Although only the four walls of the cottage were left, one of the general's A.D.C.'s and three soldiers explored the wreckage. Under a lot of chicken bones and champagne bottles they found the teeth intact. The general then had a square meal.—*British Dental Journal.*

JAMAICA (Eastbourne).—Yes, Dr. Scott was the medical attendant at that time.

LARYNX (London, W.).—Reference is made to the matter in our editorial columns this week.

ACETYL (Bradford).—We understand that the whole question of the manufacture of Aspirin and other German products is to be brought to the notice of the House of Commons.

Vacancies.

Bury Infirmary.—Senior House Surgeon. Salary £250 per annum, with, board, residence, and washing. Applications to the Honorary Secretary, Infirmary, Bury, Lancs.

Bury Infirmary.—Junior House Surgeon. Salary £150 per annum with board, residence, and washing. Applications to the Honorary Secretary, Infirmary, Bury, Lancs.

Birkenhead Borough Hospital.—Junior House Surgeon. Salary £180 per annum, with board and laundry. Applications to the Secretary.

Southwark Royal Eye Hospital.—House Surgeon. Salary £150 per annum. Applications to the Senior Surgeon.

Burton-upon-Trent, County Borough of.—Assistant Medical Officer. Salary £300 per annum. Applications to John B. Chapman, Town Clerk, Town Hall, Burton-upon-Trent.

Oxford Eye Hospital.—House Surgeon. Salary £100, with board and laundry. Applications to the Secretary.

Bolingbroke Hospital (Incorporated), Wandsworth Common, S.W.—House Surgeon. Salary £200 per annum, with board-residence. Applications to the Secretary, Bolingbroke Hospital, Wandsworth Common, S.W.

Worcester County and City Asylum, Powick. —Junior Assistant Medical Officer. Salary £250 per annum. Applications to the Medical Superintendent.

Hereford County and City Asylum.—Assistant Medical Officer. Salary £250 per annum, with board, lodging, and washing. Applications to the Medical Superintendent, County and City Asylum, near Hereford.

South Devon and East Cornwall Hospital, Plymouth.—House Physician. Salary £240 per annum, with board, residence, and washing. Applications to P. J. Langdon, Secretary.

Appointments.

FRASER, D. H., M.A., M.D., B.C.Camb., Medical Officer of the St. Marylebone Parish Workhouse.

HUEY, J. M., M.B., Ch.B.Glasg., Certifying Surgeon under the Factory and Workshop Acts for the Millom District of the county of Cumberland.

MACKEITH, JOHN, M.B.Glasg., Medical Officer to the Tuberculosis Department at the Central London Throat, Nose, and Ear Hospital.

Births.

GRAY.—On December 26th, at Alma House, Exmouth, the wife of Lieut. Robin Gray, R.A.M.C., of Stone House, Chipping Sodbury, of a daughter.

GUNN.—On December 28, at Melrose House, Perth, the wife of J. T. Gunn, F.R.C.S.Ed., Lieutenant, R.A.M.C., attached 18th Brigade, R.F.A., B.E.F.—a son.

LESLIE.—On December 26th, at Elm Lodge, Streatley, Berks, the wife of Leonard Leslie, M.D., of a daughter.

LONGRIDGE.—On December 27th, at 7 Oxford Parade, Cheltenham, the wife of C. Nepean Longridge, M.D.—a son.

MACRAE.—On December 24th, at St. Peter's Vicarage, Devizes, the wife of Major MacRae, R.A.M.C., of a son.

MORLEY.—On December 24th, at Somersby House, Barton-on-Humber, the wife of E. B. Morley, M.B., B.S.Lond., M.R.C.S., L.R.C.P., of a daughter.

OLLERENSHAW.—On December 22nd, at Palatine Road, Manchester, the wife (*née* Florence E. Watson) of Robert Ollerenshaw, F.R.C.S., Capt., R.A.M.C.T., of a son.

PRICE WATTS.—On December 28th, at Trelyon, High Road, Ilford, the wife of Dr. E. Price Watts, of a daughter.

THWAITES.—On December 30th, at 20 St. John's Park, Blackheath, the wife of Captain H. Thwaites, R.A.M.C., British Expeditionary Force, of a son.

TYLOR.—On New Year's Eve, at Mounpesson House, Wisbech, to Dr. and Mrs. Max Tylor—a daughter.

Marriages.

BOURKE—O'CONNOR.—On December 30th, at St. Dominic's Church, Haverstock Hill, N.W., Lieut. Ulick J. Bourke, R.A.M.C., elder son of Lt.-Colonel and Mrs. Ulick J. Bourke, R.A.M.C., The Firs, Hamilton, N.B., to Agnes Mary O'Connor, daughter of the late J. J. O'Connor and Mrs. O'Connor, India, and niece of Mr. and Mrs. Charles T. Strangways, Gilling Lodge, Hampstead.

MASON—EASTMAN.—On January 1st, Arthur F. Mason, R.A.M.C., 26th Field Ambulance, son of Mr. and Mrs. Mason, Steyne, Worthing, to Elsie Marion, eldest daughter of Henry Eastman, Fernlea, Southampton.

POWELL—COLE.—On December 29th, at Glencraig Church, Craigavad, Irvan Herbert Powell, B.A., M.B., B.Ch. T.C.D., second son of Lieut.-Col. C. K. Powell, M.D., R.A.M.C. (retired), 15 Cowper Road, Rathmines, Dublin, to Kathleen Harrietta Jacquetta, elder daughter of Lieut. T. Willoughby Cole, R.A.M.C.T., of Woodview, Innishannon, co. Cork, and Manor House, Dinnington, Yorkshire.

PRESTON—BIGGS.—On December 27th, 1915, at St. Thomas's Cathedral, Bombay, Captain Arthur B. Preston, R.A.M.C., youngest son of the late A. Eley Preston, C.E., and Mrs. Preston, St. Maws, Cornwall, to Doris Winifred, youngest daughter of John Maundy Biggs and Mrs. Biggs, of Bratton Fleming, North Devon.

Deaths.

BUSHBY.—On New Year's Day, 1916, at Leamington Spa, Thomas Bushby, M.B., M.R.C.P., of Liverpool, aged 58 years.

DEBUS.—On December 9th, passed away at his residence, Cassel, Hessen, Germany, Prof. H. Debus, F.R.S., &c., late Lecturer on Chemistry, Guy's Hospital, Royal Naval College, Greenwich, &c., in his 92nd year.

DREW.—On December 27th, at Montrose, Battledown, Cheltenham. Joseph Drew, M.B., M.R.C.S., aged 89.

DUNLOP.—On December 30th, 1915, at Belgrave House, St. Helier, Jersey, Andrew Dunlop, Esq., M.D., D.P.H., F.G.S., aged 73 years.

JOHNSON.—On November 29th, killed in action at Anzac, Major Frederick Miller Johnson, A.M.C., late of Melbourne, Australia, M.D. Edinburgh, C.M. Lond., grand-nephew of the late Sir William Gull, Bart.

MILLER.—Killed in action in France, on December 29th, Albert Guy Miller, Captain, R.A.M.C., attached to the 12th Middlesex, Regt., husband of Marjorie Miller, of Weybridge, and fourth son of the late Albert Miller, Whernside, Toorak, Melbourne, aged 31 years.

OLIVER.—On December 27th, after a short illness, George Oliver, M.D., of Riversleigh, Farnham, Surrey (late of Harrogate), aged 74.

TANDY.—On December 30th, at the Red Cross Hospital, Finsbury Square, while acting as Resident Medical Officer, Barre Latter Tandy, L.R.C.S.I., L.R.C.P.Ed., aged 70.

THOMPSON.—Killed in action, on December 25th, Captain Arnold Bosanquet Thompson, M.B.Oxon., R.A.M.C., 1-3 East Lancashire Regiment Field Ambulance, fourth son of Arthur Thompson, of Garthlands, Reigate Heath, and 38 Mincing Lane, aged 29.

THOMPSON.—On January 1st, in France, Lieutenant W. Frank Thompson, R.A.M.C., of The Leys School, Cambridge, and St. Bartholomew's Hospital, dearly-loved elder son of Mr. and Mrs. W. W. Thompson, of 3 The Avenue, Brondesbury, aged 28 years.

WESTLAND.—On December 31st, at 22 Albyn Place, Aberdeen, Albert Westland, M.D., aged 62 years.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, JANUARY 12, 1916. No. 2.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

Titles.

IT is not as generally known as it ought to be that among the importunate seekers after titular distinction, medical men are, as a rule, conspicuous by their absence. Ministers, especially Prime Ministers, are constantly being bombarded by people desirous of rank, and the memoirs of several statesmen reveal the insatiable thirst for a handle to his name which seems to consume the ordinary man. Sir Robert Peel and Lord Beaconsfield both expressed themselves in terms of characteristic contempt of these rank hunters. The former, writing to a friend, said: "The distinction of being without an honour is becoming a rare and valuable one; it should not be allowed to become extinct." Dizzy, on being asked to give the Thistle to a Scottish peer whom he hated, said "Certainly not; if I gave it to him he would eat it." Fees in respect to honours used to be very heavy. The direct fees were nearly all abolished by King Edward in 1902, but, as it was shown in a discussion in the Commons not long before the war, the indirect fees are sometimes enormous.

Doctors and Titles.

MEDICAL men are fortunately altogether free from the suspicion of having bought their titles, a reproach which attaches to a not inconsiderable number of people thus distinguished. We are certainly sometimes surprised, not to say startled, when some of our number blossom forth into titles, as for example, when a general practitioner of Mayfair emerged from obscurity as Sir George Hastings. To explain his elevation the lay Press could find nothing more outstanding to record than the fact that he was Consulting Physician to the Gas Light and Coke Company. Such cases are, however, rare; and no one has ever been heard to suggest anything venal or mercenary in connection with them. It is far more often that we have to deplore want of recognition—at any rate of adequate recognition—for really good service of incalculable monetary value to the community.

Sir David Bruce.

OF this there is no better instance than the case of Sir David Bruce, the distinguished Surgeon-General to whom humanity owes the extinction of Malta Fever, and who has contributed enormously to our knowledge of sleeping-sickness and other tropical diseases. He gained great military distinction in South Africa. Especially valuable were his services during the siege of Ladysmith. He has been in the forefront of scientific medico-military matters for many years, and enjoys the distinction, very unusual in military men, of being an F.R.S. The official recognition of his brilliant services to his country, to science and to humanity has taken the form of giving him the same rank as Sir Thomas Crosby and sundry provincial mayors. If there were any sense of proportion in the distribution of public rewards Sir David Bruce would have been given a Viscounty and a large sum of money. As things are, he is without any pecuniary reward and is on the same level of precedence with the consulting physician to the Gas Light and Coke Company.

Baronets.

THE only instance, so far as I am aware, of a medical man, *quâ* medical man, being raised to the peerage was the late Lord Lister, but there have been a great many medical baronets. The presidency of either of the Royal Colleges is now considered to carry a baronetcy with it. In the case of the Royal College of Physicians (of London) the first baronet was Sir Hans Sloane, who was president in 1719. Then came Sir George Baker in 1785. Since Sir Thomas Watson, in 1862, all the presidents have been baronets with two exceptions, Sir James Alderson, 1867, and Sir James Risdon Bennett, 1876, both of whom were Knights. There are now twenty medical men who have attained to this dignity; one of them, Sir Leander Starr Jameson, was thus rewarded for services other than medical. There are, I believe, but two medical men who have inherited baronetcies, Sir Hugh Beevor, who is the 5th Baronet, and Sir John Broadbent, who succeeded his distinguished father as 2nd Baronet in 1907.

Sir Ronald Ross.

SIR RONALD ROSS and Sir Henry Morris have both contributed to the discussion which has been taking place in the *Times* on the subject of whistling for taxis. Sir Ronald Ross, who, like Sir David Bruce, and perhaps to an even greater degree, has placed science and

humanity under a debt of profoundest gratitude, was, like the latter, originally in the Indian Medical Service. He was awarded the Nobel Prize in 1902, is an F.R.S., and carries after his name a long list of honorary degrees and fellowships. Official recognition in his case has taken the form of a K.C.B., which, though a degree or two higher than the Knight-bachelorhood conferred on Sir David Bruce, is still ridiculously inadequate to the value of his great, abiding and epoch-making contributions to science and the prevention of disease. Sir Ronald Ross has made the total extinction of malaria and allied diseases not only a possibility, but a probability, and has thus rendered the Tropics habitable by the white man. Sir Ronald is a poet of no mean order. Like Sir Victor Horsley, he is a convinced suffragist.

Whistling and Hooting.

Sir Henry Morris, who is a baronet in virtue of his former tenure of the Presidency of the Royal College of Surgeons, has more than once addressed the Editor of the *Times* on the subject of noisy taxis, and wrote last week a letter in reply to an anonymous "F.R.S." who had made the following three statements: (*a*) After midnight there is now no whistling nor motor-horn blowing. (*b*) The abolition of the motor horn would gravely increase the mortality among pedestrians. (*c*) Telephoning for cabs is useless. After pulverising (*a*) and (*b*) in his most vigorous manner, Sir Henry deals with (*c*) as follows: "The occasional failure of telephoning is more than paralleled by the frequent failure of the whistle. Enforced confinement to the house for some days has afforded me the opportunity of seeing that much of the whistling for cabs is as foolish as it is futile. Men and ladies with nothing to carry but an umbrella, a stick, or a muff will come to their street doors in fine weather, preceded by a servant who forthwith begins to whistle, and unavailingly continues doing so for double or treble the length of time required to walk to and pick up a cab in Regent Street or Oxford Street." Sir Henry concludes his letter on rather a pessimistic note: "But we are kicking against the pricks! It is not likely that either the State authorities or private individuals will take any steps during these troublous and perilous times of warfare, political unrest, and difficult economic problems to remove the scourge of noises, seeing that they would not raise a finger for our relief during the indifference, indulgence, and apathy of peace time."

A Precedent.

I sincerely hope that this is not his last word on the subject. Some of us remember with gratitude that it was in war time that the London County Council bestirred itself to the point of putting a stop to the outrage of newsvendors bellowing their wares in alarmist tones through the residential quarters of the Metropolis, and if those who, like Sir Henry, are eminently qualified to speak on the present question, will keep on speaking in definite tones about the cruelty inflicted by whistles and horns upon the sick and suffering, there is every reason to hope that some good will come of it. To the abolition of hooting there may be some reasonable objections, but to the abolition of that diabolical invention called the Klaxon there can be no objection whatever. Nor is there any defence for whistling after 11 p.m.

A Manchester Director.

At the end of last month, at the Manchester Munitions Court, in reference to an application by an apprentice for discharge on account of gastric catarrh, in support of which a medical certificate was produced, the managing director of a munitions factory is reported to have delivered himself as follows:—"Without disparaging the doctors at all, I think I can say that we all know what family doctors are. You can get almost any kind of certificate from them." Dr. R. G. MacGowan, who is a well-known Manchester physician and a prominent member of the Manchester Insurance Committee, on having his attention called to the matter by a representative of the *Manchester Courier*, said: "A more unfounded charge it would be hard to imagine. I think it disgraceful that such a statement should be made. The charge, I notice, is worded in such a way that no individual is named, and therefore no legal action can be taken. It is very easy to bring such charges against a body of men, but it is not easy to prove them—in fact, in this instance it is impossible, because the statement made by the gentleman in the Munitions Court is simply not true."

Bounders and Greengrocers.

I am glad to see that Dr. MacGowan has expressed himself in this forcible manner. The members of the profession, as a rule, are far too docile in the presence of these preposterous attacks. To treat these semi-patronising vulgarities with contempt is, in a sense, a dignified attitude to adopt, but it is one which, if too long maintained, may easily give encouragement to the bounders and greengrocers who perpetrate them. The ordinary person can appreciate in others only such qualities as he himself in some degree possesses. Bounders and greengrocers are not necessarily imbued with a sense of the importance of their signatures at the foot of a document, unless the document happens to be a cheque, in which case the law impresses the importance upon them in a manner which may be disagreeable. They do not realise that a man's conscience can supply a more powerful deterrent than the fear of the law. But such is the case, and it is very much the case with members of the medical profession.

The "Star" Readers.

I see that the *Star* is continuing its campaign in favour of Mr. Barker, the bone-setter. The War Office having had the audacity to refuse to allow this gentleman to treat recruits gratuitously, there is a tide of indignant correspondence on the subject, which appears to be for the most part typically suburban in character. A relieving note of distinction, in residence if not in thought or expression, is supplied by a lady writing from Mayfair, who signs herself Gertrude Wilkinson. Here is her contribution:—"The Briton boasts of love of Free Trade and Fair Play, and yet at this most perilous crisis our Government dares to

refuse to a man who is known far and wide as a great surgeon and a great healer the permission to heal—officially. He has cured thousands, and now offers to give up a large income to fit men to fight for their country. Shall it be endured that red-tape and prejudice prevent him?"

Mr. Barker.

This is a very fair specimen of the hysterical balderdash, by publishing which the *Star* seeks to impress its readers in favour of Mr. Barker. The pudding-brained nonentities who deal in this kind of delirium do not seem capable of appreciating the fact that if Mr. Barker is the heaven-born surgeon they would have us believe him to be, he would have no difficulty whatever in obtaining a surgical qualification. If he prefers to remain without a legal qualification, it is to be supposed that he has good reasons for this preference. An unqualified man has greater freedom and less responsibility than one who is qualified. There are several disabilities attaching to a qualification, that which forbids advertising for example. This is commercially a very severe one, so severe that there are many who consider it overwhelming. The suburban enthusiasts, who write to the *Star*, demand for Mr. Barker that he shall be given the best of both worlds, the narrow sanctity of orthodoxy and the broad free-lancing of heterodoxy. They might as reasonably demand for Mrs. Pankhurst the Archbishopric of Canterbury.

Medicine for Women.

A non-medical correspondent writes me a long letter, the gist of which is that it is all very fine for me to take up the cudgels on behalf of my own cloth, but that it is useless for me to do so, as long as there are members of the profession who, whilst blowing their own trumpets in the lay press, "blow the gaff on the supposed nobility of our calling." In support of his rather vague position, he encloses an article which appeared in the *Westminster Gazette* on December 20th, entitled "Medicine for Women," by Dr. C. W. Saleeby, with the following passage underlined: "The public and not least the Child of Life are paying the price for the pitiful hostility (to medical women) of male members of the medical profession, in the palpable interests of the Calf of Gold, to which, however, no clause in the Hippocratic Oath is dedicated."

Unworthy Motives.

This is not a very lucid pronouncement, but in so far as it means anything, it seems to suggest that the opposition of male doctors to the entry of women into the profession is a purely mercenary one; that the opposition is, in fact, based upon the fear of competition. If this is what Dr. Saleeby really means to convey to his lay readers he ought to be ashamed of himself. He must know perfectly well that no doctor expects to escape competition, and that every male would, in his own interests, rather have a female competitor than one of his own sex. But that is not all. Dr. Saleeby must also know perfectly well the "pitiful hostility of members of the profession" to their sisters, daughters, nieces and wards entering the profession is based not upon monetary consideration but upon their own vivid recollection of the hardships and disillusionments inseparable from the student's curriculum; the mental strain, the physical fatigue, the revolting realities of the dissecting-room, the pathos of suffering in the wards, and the impressive nerve-shattering ritual of the operating theatre. Who, having himself suffered these things, and remembering them, would not prefer that his young women folk should take to some calling less exhausting in its apprenticeship and less exacting in its pursuit?

Medical Women.

Dr. Saleeby tells us that he has for years advocated the "medical woman." If this is the kind of advocacy which he has brought to her support she may well pray to be saved from such a friend. To impute mercenary and other unworthy motives to those who do not agree with you is a mark either of ignorance or weakness. In Dr. Saleeby's case it is certainly not ignorance. In a later passage in the same article the writer says: "On every ground, therefore, as a public practitioner, I now prescribe Medicine for Women." For individual women such a prescription may be a very good one; but thus to prescribe at large, without reference to individual needs and temperaments, is the way not of the qualified practitioner, but of the unqualified.

Qualifications.

But the real inwardness of the article is revealed in the following passage: "In general clinical medicine, in obstetrics and gynæcology, and in the care of infants and children, women have sexual qualifications which often make them preferable to men on every score." It would be interesting to know what Dr. Saleeby means by the adjective "sexual" in this connection, and it would be still more interesting to be told what the "sexual" qualifications are, which render woman, as a doctor, superior to man "on every score." We are perhaps intended to infer that one of these qualifications is the stability of mental equipoise and added soundness of judgment which betoken menstruation; and that another is the combination of physical vigour, sweet reasonableness and philosophic calm, so characteristic of the menopause.

Sinapis.

Lancaster district farmers' sale for the British Red Cross Fund on December 15th resulted in a total of about £2,000, the largest sum yet taken in Lancashire. Six professional auctioneers were kept busy all day. Mrs. Briggs, the Mayoress, sold the first lot. Alderman Nuttall, Mayor of Blackburn, spent two hours in a heavy downpour of rain at Blackburn selling farmers' products for the Red Cross Fund. An egg sold for 82s.

Two motor ambulances, the gift of the women of Deptford to the British Red Cross Society, were formally presented to the Society by the Mayoress of Deptford at Goldsmith's College, New Cross, recently.

In Greater London during the week ending December 18th 2,855 births and 2,068 deaths were registered. Allowing for decrease of population, these numbers are 582 below and 17 above the respective averages in the corresponding weeks of the previous five years.

CURRENT TOPICS.

Crawford Long and Ether Anæsthesia.

WE publish in our present number a historical note by Dr. George Foy on Crawford Williamson Long, the discoverer of the use of ether anæsthesia in surgery. There is, we think, no longer any doubt that Long is entitled to the credit of priority over Morton in the introduction of ether as an anæsthetic agent. Long used the drug in a series of operations with satisfactory results, and he communicated the facts to his medical brethren. He was, however, a country doctor without influence or powerful friends, and his discovery attracted little attention. There is no ground for believing that Morton had ever heard of it, or that his discovery was other than quite independent. Morton, however, had the good fortune to interest Warren, and when the experiment proved a success, Morton—powerful and enlightened—was able to spread the knowledge of the new agent throughout the civilised world. But in the honour that is rightly due to Morton, the humbler and less famous Long must have his share. Not the least interesting part of Dr. Foy's article is that in which he shows the gradual evolution of knowledge of anæsthetic drugs, and the part played in that progress by his fellow-countrymen. Higgins, of Sligo, and Mrs. Beddoes, of Longford, prepared the way for Crawford Long, the grandson of a Donegal man.

The Probationer.

IT is a matter for regret that so much of the probationary nurse's time should be occupied by the purely domestic work, frequently even having no direct bearing upon sick-room management. The mere distribution of meals, together with the tidying of wards, and arrangement of patients preparatory and subsequent to the daily visit of the clinical staff, demand the major portion of the day. Such time as is left is required for a hard earned rest. In this connection, the theatre and extern nursing staff come off best, being engaged for the most part in technical work. As a result of continual cleaning up and household work, many girls commencing their training quickly tire of their intended profession—not having an opportunity of seeing it from the more expert point of view. Above all, in a hospital which has numerous clinical clerks and surgical dressers, especially if these be keen, the nurses' share tends to degenerate into the mechanical giving of medicines and enemas—together with an automatic pulse or temperature plotting. It is, we know, largely unavoidable from an economic point of view—yet it might be possible to make the junior nurse more intimate with the purely medical side of the cases and thus enhance the interest of her own work, and her usefulness in the occupation she has chosen.

Symptomatic Treatment.

WE have chosen this week for re-publication as our representative article from the recent American literature an article on Symptomatic Drug Treatment by Dr. Joseph Miller, of Chicago. It must be admitted that our colleagues in America are somewhat more ready than ourselves to try the new and cast the old aside. Their minds are fresher, less conservative, and we think, on the whole, less critical. In this matter of symptomatic treatment the Americans are less habit-bound than we, and it was not without significance that in the compilation of a large book on treatment by distinguished American editors a few years ago the chapter on drug treatment was committed to an English physician. Dr. Miller's article, which we print this week, is an attempt to face the question of how far treatment of symptoms is sound and just, and this is the essential point at issue. Many of our drugs influence symptoms readily enough, but how few exert much influence on the course of the disease? Moreover, suppression of the symptoms, although comforting to the patient, may be very harmful to him. The question has never been fairly faced as yet—and it is so easy in practice to relieve a symptom. Dr. Miller makes one suggestion which, if it were possible to carry it out, would have a high educative value. It is that students should be given an opportunity to observe untreated cases side by side with those that are treated. If this were possible, it would go far to do away with the *post hoc ergo propter hoc* inference which is the basis of so many of our therapeutic conclusions.

Institutional Statistics.

SUCCESSFUL returns are the legitimate aim of all institutions, medical and otherwise, but there should be no sacrifice of truth or principle in order to further a more auspicious result. In our experience, there is occasionally an anxiety to commit cases presenting an obviously hopeless prognosis to the care of relatives, in order to avoid their death being directly associated with the institution in question. Inasmuch as no more could be done for the sufferer, it might be even regarded as a benevolent act to allow the final days to be spent in the company of those near in blood; but it is quite evident that the yearly return in such a case must be seriously vitiated should any substantial number of such cases have occurred, and also that no sound inference could be drawn. Again, in institutions possessing medical officers, although not themselves hospitals, similar instances have occurred, where inmates have been sent long and injurious journeys to some professed hospital when they would have been more advantageously allowed to remain where they were. Such procedure in a condition of cerebral hæmorrhage, for example, is both harmful and futile—yet in one case we can call to mind death ensued an hour or two after transference to the local infirmary, the cause of death being subsequently determined as extensive blood-extravasation of the brain. We are far from suggesting that any extensive practice of the kind exists—but even isolated instances are surely not to be commended.

Intravenous Injections of Sugar.

IN the *Journal of the American Medical Association*, Messrs. R. T. Woodyatt, W. D. Sansum, and R. M. Wilder describe an ingenious device whereby continued, prolonged, and accurately timed

and measured intravenous injections can be made. By this means sugar solutions can be injected into man or animals at any desired rate and for any period of time, and the actual sugar tolerance and utilisation determined with the factors of absorption entirely eliminated. Studies made with this *technique* showed that a seventy kg. man could utilise about 63 grams of glucose an hour, which is equivalent to 652 calories an hour, or 6,048 calories a day. Intravenous nutrition is, therefore, possible by this means. The normal human glucose tolerance was found to be about 0.85 grams an hour per kgm. of weight when given slowly by a vein. The idea that the glycogenic function of the liver is essential for the utilisation of glucose, or that it is essential as a barrier to prevent the loss in the urine of absorbed sugar, has been proved incorrect by these experiments. The idea that any large quantity of sugar given by vein always causes diuresis and glycosuria was also disposed of. In Graves's disease the intravenous tolerance was found to be as low as 0.65 grams per kgm. an hour. The tolerance limit for lævulose was found to be about one-sixth that for glucose; for galactose it was even less; and for lactose it was zero. When glucose was given intravenously at a rate faster than 0.9 gram per kgm. an hour, glycosuria appeared and later diuresis. The glycosuria soon reached a level and remained at that point during any rate of injection, which point depended on the rate of administration. By comparative tests it was shown that the maximum rate of sugar absorption after oral administration did not exceed 1.8 gram per kgm. an hour. Intense diuresis could be produced by the injection of amounts of sugar in excess of the tolerance, and the dangers of dehydration or hydræmic plethora then made their appearance. The clinical applications of this method are: The abstraction from the body of any desired quantity of water and the flushing of the body with any desired and safe amount of water.

Walsall Facts and Fables.

We congratulate the panel doctors of Walsall on their champions in the local Insurance Committee. We read that at a meeting of this Committee, Dr. Hawley drew attention to statements made by a member, Mr. G. Power, who is also secretary of the Midland Leather Trades' Federation, at a meeting of the local Friendly Societies' Council to the effect that owing to the great numbers of patients which local doctors had on their books insured workers were unable to get proper attention; that in some instances persons had to wait outside surgeries in queues, and had been kept waiting three or four hours before they received attention. Dr. Hawley said he denied that there was the slightest foundation for any of these charges. As a matter of fact, local doctors had had less surgery work since the war started. Following this, Dr. O'Meara said if such things were going on Mr. Power should have complained to the Insurance Committee. As a member of the Committee his attitude was disgraceful, and he ought not to continue to be a representative of the insured workers. Mr. Power replied that the object of the medical profession was to "gag" people, and so prevent them from expressing their opinions. He added that as the matter had been taken up by the Friendly Societies' Council he could not withdraw the charges without consulting them. A resolution was carried asking that the charges should either be withdrawn or substantiated. Mr. Power voted for the resolution, remarking that it was perfectly satisfactory to him.

Mr. Power's attitude is typical of a class—unfortunately large—which poses as the protector of the poor insured workers. When challenged, he takes refuge behind a partisan Council which is supposed to be investigating his charges. Mr. Power, of course, made his original statement to a Friendly Societies' Council, where he probably felt sure of gaining cheap applause by "slanging the doctors," and where he felt equally certain of no contradiction. Dr. O'Meara is perfectly justified in characterising Mr. Power's attitude as disgraceful. It was that gentleman's duty as a member of the Insurance Committee to bring his "facts" at once to their notice, when a proper inquiry could have been instituted. If Walsall workers have to stand in queues and wait three or four hours before they receive attention, Mr. Power could without difficulty have produced a cloud of witnesses, and we know his type well enough to feel sure he would have missed no possible opportunity of so doing. He prefers to tub-thump in the kind of gathering well known for hostility to the medical profession, where froth is mistaken for fact. Dr. Hawley and Dr. O'Meara deserve the thanks of their brethren for their castigation of the secretary of the Midland Leather Trades' Federation.

Mixt. Diabol.

It is not often that we find in the *Times* anything which is humorous from a purely medical point of view. The following, which recently concluded a purely medical article in a light vein, is an agreeable exception. We have all had our favourite recipes for this particular dissuador; there has even been a fiendish rivalry among different schools for the production of the finest brew. When we last inquired into the matter the Bart's vintage was said to be the best.

"Mixt. Diabolica."

"But we do think we know how to deal with the 'skrimshanker.' We give him every chance; we even have a consultation over him, and then, if we are quite certain in our mind, we put him on our celebrated Mixt. Diabolica. Its composition is, and must remain, a secret, but its action is certain and speedy. It is almost as miraculous as the Holy Water of Lourdes.

"To show you what it can do, it cured *in one dose* a man who complained of deafness and blindness, pains in the back and side, pneumonia of eight week's standing, inability to feel his feet or stand, and a few other trifles. He lay on his cot, a helpless wreck for hours before, but after one dose, all he wanted was water to drink, and to get back to his regiment as quickly as possible. It is 'some' medicine!"

PERSONAL.

Surgeon Douglas Moody, R.N., lost his life through the explosion on board the *Natal*. Amongst those saved is Surgeon E. S. Tuck.

Capt. J. D. Buchanan, one of the leading surgeons of Brisbane, has died of wounds. He served in a Field Ambulance of the Australian Force.

Dr. J. D. Murphy, temporary Second Assistant Medical Officer at the Marylebone Infirmary, has obtained a commission in the Navy, and has resigned his appointment under the Board of Guardians.

Dr. J. Bell Ferguson, Tuberculosis Officer of York, was desirous of accepting a commission in a military sanitary corps. York City Council has refused to release him. It was stated that the death-rate of the city was almost equal to the birth-rate.

Staff-Surgeon Alfred Oswald Hooper, M.B., was lost in the explosion on board H.M.S. *Natal* on December 30th. Dr. Hooper was Assistant House Surgeon at Leicester Royal Infirmary before joining the Navy.

FRENCH CLINICAL LECTURE
ON
CHRONIC RECURRENT TETANUS.

By ALBERT MOUCHET, M.D.,

Surgeon to the Paris Hospitals, Chief Surgeon to the Auxiliary Hospital No. 26, at Orleans.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

THE tetanus with which most of us have become familiar since the war broke out, especially during the early months, was acute or hyperacute tetanus. For that matter it is highly probable that we shall in future hardly ever be called upon to deal with this complication now that the medical service at the front is adequately provided with anti-tetanic serum and preventive injections are methodically employed.

Though extremely rare, chronic recurring tetanus deserves our attention. It is not so easy to recognise but it is also more amenable to treatment, since its existence, dependent on the retention of a foreign body in the tissues, disappears as soon as this is extracted.

Out of a score of cases of tetanus which have come under my notice in my own "formation" or elsewhere, I have on two occasions been called upon to deal with cases of chronic recurring tetanus. One of them was under the care of Dr. Auboyer, and as he has published it in the *Paris Medical* I need not go into details.

The other case was the following, and its course was sufficiently interesting to make it worth recording. "J. C.," age 23, was wounded on October 28th, 1914, by a fragment of shell, which buried itself in the left supra-spinous fossa, making a not very big wound with somewhat irregular edges. He was transferred to Pithiviers on November 1st, under Dr. Bazor. As the wound, though septic, was not suppurating much, it was not thought necessary to open it up, simple antiseptic dressings being applied. His general health was excellent, appetite normal, no temperature.

After the ninth day (13 days after the infliction of the wound) Dr. Bazor noticed that the patient's head was tilted towards the wounded side and that he had some difficulty in straightening it, the effort to do so moreover was painful. The patient also complained of more or less continuous pains associated with periodical exacerbations. These symptoms led Dr. Bazor to give him an injection of anti-tetanic serum (20 cc.).

The attacks of pain became more marked and more frequent, the bent attitude of the patient looked more and more like a contracture which became more pronounced when the pain came on, the pulse at the same time rising to 100-110 a minute. He perspired copiously, though the temperature remained normal. As the diagnosis of tetanus was pretty certain the patient was isolated and placed under observation.

The contractures became more pronounced and trismus supervened. The temperature, 99° in the morning, did not exceed 99.9° at night. Cerebral excitement well marked: restlessness, hallucinations, delirium, insomnia. The classical treatment with massive doses of chloral and morphine was instituted. He was also given a second injection of serum (10 cc.). Little by little the attacks of contracture diminished, the delirium ceased, the pulse became less rapid and by December 25th the patient appeared to be well. He was then sent to a convalescent home.

The wound in the right supra-spinous fossa was still suppurating slightly and a few splinters of bone came away in the dressings. During the rest of the month (January) his local and general state remained satisfactory, though the pains persisted as well as the stiffness of the shoulder, which the patient was unable to overcome.

On February 1st he was sent back to the hospital with a fresh outbreak of tetanus, trismus reappeared to some extent and the contractures returned, especially on the left side, with pleurosthotonos, wild delirium, rapid pulse, etc. An injection of 10 cc. of serum was again given and chloral was administered.

The X-rays showed a piece of shell in the subclavicular fossa, between the thoracic wall and the anterior surface of the scapula, moving with the latter. Consulted at this juncture by Dr. Auge, I strongly advised its removal, but circumstances precluded the operation being performed until February 7th, when the patient was in the midst of an attack of tetanus, pulse 125. Under chloroform I opened up the fistulous wound and removed the foreign body without much difficulty. It measured one centimetre in width and four in length, and with it came away fragments of cloth. Bacteriological examination revealed the presence of a few tetanic bacilli.

For some days after the operation the patient's state remained unchanged, though healing was proceeding nicely. The temperature rose to 102.2° F. night and morning for six days. After the tenth day the temperature and pulse began to improve and the delirium subsided. On the other hand, the contractures began to lessen directly after the intervention, and the trismus disappeared almost at once. The laryngeal spasms persisted for another ten days, preventing his taking ordinary food. On February 29th the patient had completely recovered, but the operation wound did not finally heal until March 10th.

Certain practical lessons are to be drawn from the history of this case. Of course, it would have been better if the patient had been given an injection of serum at once, directly after being wounded, and not having had it he contracted tetanus. But as the fragment of shell was left in the sub-scapular fossa he would still have been exposed to an attack of late tetanus after the antitoxin had been eliminated or its neutralising action had become exhausted, because fresh toxins might have been secreted by the tetanic bacilli embedded in the *débris* of cloth adhering to the bit of shell.

It is easy to understand that it was not thought necessary to inject serum for such a small wound, but, having learned by experience of such cases, the risk of delayed tetanus running a slow course, I hold that every wound inflicted by a projectile calls for the injection of serum, especially when caused by splinters of shell, which invariably carry in with them bits of clothing. This remark applies also to wounds with only the aperture of entry.

In some instances the patient tells us that he has been injected at the front, but in most instances he knows nothing about it. In any case, unless it is

entered on his hospital ticket that an injection has been made, the surgeon in the rear should make a practice of giving it, though, as a measure of prudence, he may begin by injecting a small quantity should the patient think he has already had one.

Another lesson is to be drawn from this case. This soldier's wound seemed insignificant and had been duly cleansed; but, insignificant though it seemed, it ought to have been opened up in the absence of any information as to the nature of the projectile. We know well enough that tetanus only too often follows apparently trifling wounds, precisely because they are small and are therefore neglected. Antiseptics cannot be brought into contact with the tract, so that when any tetanic bacilli happen to be present they find in this closed wound very favourable conditions for their proliferation.

If in this case the wound had been freely opened up, the surgeon might, even in the absence of radioscopic data, have come upon the projectile and cloth *débris* carried in therewith. The opening up would not only have been prophylactic, but also curative. However this may be, the laying open would have allowed antiseptics free access to the recondite corners of the tract, and so hindered the proliferation of pyogenic microbes and *pari passu* of tetanus.

This case reinforces and confirms the axiom that every wound by projectiles in war when seen to be infected (however trifling they may seem) are to be freely laid open. This is a fundamental rule which is to be strictly observed and acted upon, a point upon which we cannot too strongly insist. The subject runs no risk—on the contrary, in most instances he stands to gain a good deal. Independently of the serum injection, the value of which has now been placed beyond question, free early opening up and thorough disinfection of the wound unquestionably plays a foremost part in averting tetanus.

There is one other detail in the case that deserves attention—viz., the presence of stiffness of the shoulder on the wounded side, constituting the first symptom of tetanic contracture. Although trismus and dysphagia are, are a rule, the earliest symptoms of tetanus, we are justified in attaching great importance to "stiffness" in the neighbourhood of the wound. If we then examine the wound attentively, we find that it is not merely a reflex contracture due to the proximity of the wound, but a sign of tetanic intoxication that is running its course.

Lastly—and this is the great lesson to be drawn from this case—from the moment that tetanus makes its appearance in a case in which the projectile is still in the tissues, it must, if possible, be extracted at the earliest possible time. For this purpose early radioscopic examination is indispensable, after which no time should be lost.

In the present case, had the projectile been extracted at the onset of the disease, the patient would not have been exposed to the risk of a relapse as soon as the neutralising effect of the injection of serum had passed off. This relapse was the more to be apprehended in presence of the unremoved projectile, seeing that the wound had not completely healed. The soldier was allowed to leave as convalescent with a stiffness of the shoulder, which ought to have suggested the possibility of tetanic contracture.

The injection of anti-tetanic serum, free opening up of the wound, and extraction of the projectile constitute the tripod therapeusis on which our treatment of such wounds must be based.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Tom A. Williams, M.B., C.M.Edin., Lecturer on Nervous and Mental Diseases, Harvard University, Washington; President, Washington Society of Nervous and Mental Diseases; Foreign Correspondent, Member of the Society of Neurology, Paris, etc.; Neurologist, Freedmen's Hospital and Epiph. Dispensary, Washington. Subject: "The Management of Functional Nervous Affections: Modern Methods Illustrated."*

ORIGINAL PAPERS.

SOME BRITISH MEDICAL MEN OF LETTERS.*

PART II.

By W. H. MAIDLOW, M.D., F.R.C.S.

SIR THOMAS BROWNE, the author of "Religio Medici," was born at Cheapside 14 days after the exposure of Guy Fawkes. From Winchester College he proceeded to Pembroke, Oxford (incidentally also Johnson's), thence to study at the great medical schools of Montpellier, Padua, and Leyden, which granted him his degree. He travelled over a good part of Europe growing in knowledge of men and things. "For my own part," he writes, "besides the jargon and patois of several provinces, I understand no less than six languages, yet, I protest, I have no higher conceit of myself than had our fathers before the confusion of Babel." On his return to England, he settled at Halifax, where he began his immortal work; but Halifax was not responsive, and he finally settled at Norwich, which town he adorned till he died. The Pope put "Religio Medici" in the "Index Expurgatorius." He certainly was no bigot—"At the sight of a cross or crucifix I can dispense with my hat, but not with the thought of my Saviour; I cannot laugh at the fruitless journies of Pilgrims or contemn the miserable condition of Friars. For though misplaced circumstances, there is something in it of devotion. I could never hear the Ave Maria Bell without an elevation or think it a sufficient warrant because they erred in one circumstance for me to err in all."

Of his children, one son became physician to Charles II. and President R.C.P., and *his* son was likewise a physician. Of his other children, a daughter is the ancestor of the present Earl of Buchan. His son Tom was killed in the Dutch Wars. Sir Thomas died 1682 of some sort of colic, associated with influenza, and, like Shakespeare, on an anniversary of his birthday, apparently as anxious as was Shakespeare about his bones! Less lucky, however, for in 1840 his skull was "knaved" from his grave, apparently during some repairs. The skull was shown at the Norwich Hospital, but, I believe, has been re-interred at the instance of the British Medical Association. I make a few more quotations:—"Let me be sick myself if sometimes the malady of my patient is not a disease to me. I desire rather to cure his infirmities than my own necessities. Where I do him no good methinks it is no honest gain, though I confess it to be the worthy salary of our well-intended endeavours. I am not only ashamed, but heartily sorry that besides death there are diseases incurable; yet not for my own sake, but for the general cause and sake of humanity, whose common cause I apprehend is mine own. . . . There are not only diseases incurable in Physicke but cases indissoluble in Laws, vices incorrigible in Divinity."

Compare his Evening Hymn, which he calls his "dormitory," his "Colloquie with God" with that of Ken, who came to Winchester after him, where he wrote his better-known "Evening Hymn" for

* A paper read before the Ilminster Literary Society.

Wykehamists. Browne takes "no other Laudanum to sleepe," "after which I close my eyes in security, content to take my leave of the sun, and to sleep until the Resurrection."

He says :—

"Sleepe is a death, O make me try
By sleeping what it is to die,
And down as gently lay my head
On my grave as now my bed."

Ken has :—

"Teach me to live that I may dread
The grave as little as my bed."

JOHN LOCKE.—My next is a philosopher par excellence, a Somerset man born unexpectedly at Wrington in 1632, the famous John Locke. Westminster School, under the headship of the well-known Busby, was his public school, and after that came Christchurch, Oxford. We find him in comparative youth ridiculing the notion that public school life at all fits a boy for any subsequent occupation. He maintains the impossibility of proper individualisation. Perhaps he was not a success at Westminster. He became M.A.Oxford in 1660, and may have taken some medical degree there. Anyhow, he became the family physician of Lord Ashley, afterwards Earl of Shaftesbury, who seems to have had a suppurating hydatid cyst.

He had a good deal to do with the education of two subsequent earls, and probably arranged the marriage between the third Earl and Lady Dorothy Manners on eugenic lines. At 40 he got some sort of chronic bronchial asthma, gave up medical work (although in 1675 we find he attended, for neuralgia, the Duchess of Northumberland with more success than the French doctors), and took up philosophy more keenly. On his return to England from France, after some diplomatic business in 1679, he got involved in political intrigues, mixed up with the Monmouth plot, and fled to Holland, to return with Queen Mary in 1689. William III. tried to persuade him to become his Ambassador in Prussia, but his poor health prevented him; he said he could not "*drink* sufficiently." He died peacefully, aged 72, in the circle of such great men as Sydenham, Newton, Dryden, Cudworth and Hobbes.

No educationalist is complete without a knowledge of his "Thoughts concerning Education," and every doctor should read his "Human Understanding." He sums up his philosophy of life thus :—

(1) It is a man's proper business to seek happiness and avoid misery.

(2) Happiness consists in what contents the mind —misery is what disturbs it.

(3) Care must be taken lest we prefer a short pleasure to a lasting one, otherwise it is plain we cross our own happiness.

This last clause prevents the "Omar Khayyam" view :—

"Oh plagued no more with human or Divine,
To-morrow's tangle to itself resign."

The physicians in the times of William III., Anne, and the early Georges, took prominent parts in the politics. Thus we have amongst pronounced Whigs Sir R. Blackmore, physician to William III., also a voluminous and boresome poet; Richard Mead, Arbuthnot and Garth. On the Tory side we have especially Radcliffe, famous alike as a physician and partisan, the founder of the Radcliffe Library, a scholarship, and the Infirmary at Oxford. There is a story told of Brocklesby, of whom more anon, how he was so engaged in a wordy fray with the Duchess of Richmond's butler that he quite forgot he was there to see a patient. Poor Anne must have had a rather trying death: Radcliffe refused to do what he could, and Mead wanted her to live only long enough for political purposes.

During these reigns most of the leading physicians were men of letters; in fact, it was probable their literary association fed their medical fame. Their names appear in most of the text-books of English literature, but I suppose that with the exception of Goldsmith they are neither read nor remembered, or even heard of by the ordinary reader. Thus we have a group from 1700 to 1760 contemporary with such men as Dryden, Addison, Pope, Steele, Gray, Swift and Samuel Johnson. They were all more or less associated with the two clubs, the "Kitcat" and the "Literary Club," of which Goldsmith was an original member. I believe these literary clubs still live.

These men are of too remote an interest to justify more than a passing mention. Sir SAMUEL GARTH, M.D.Cantab., was Dryden's physician and attended George I. To him we owe a proper burial for Dryden and a great funeral oration for that poet. During the oration he fell into a tub on which he was standing! His death was somewhat like that of Rabelais. He murmured to his physician, "I wish the ceremony of death were not so long," and asked to be allowed to die a natural death. He was perhaps the most witty of the members of the Kitcat Club; his patients possibly valued his bon-mots more than his prescriptions.

Pope wrote of Garth after his death: "If ever there was a good Christian without knowing himself to be so it was Garth." The same author says: "He was a Whig without a rancour and a bon vivant without selfishness." Garth was knighted with the sword of Marlborough. He died in 1719, and is buried at Harrow.

Thus Johnson: "I think Arbuthnot the first man amongst them" (the eminent writers in Queen Anne's time). "He was an excellent physician, a man of deep learning and of much humour."

JOHN ARBUTHNOT came from the North. Before settling in London he tried practice at Dorchester, became physician to Queen Anne, was the great friend of Swift, and of Pope, who loved him. Amongst his other writings, he is famous for the history of "John Bull," which expression he coined. He figures John Bull as a clothier. "What is the time?" said Queen Anne one day. "Whatever it may please your Majesty," answered the court physician.

RICHARD MEAD is another example of a man prominent in his times and centre of a learned group who is now largely forgotten. He was physician to Queen Anne with Arbuthnot, and was greatly instrumental in the establishment of the Hanoverian Monarchy by insisting that Her Majesty would soon die, thus frustrating the Jacobites, who wanted more time for the Restoration. He is said to have made as much as £1,000 a year. He made no great contribution to general literature, but was the companion, friend and benefactor of many great writers. His "Medica Sacra" is an interesting medical curiosity. He had dancing lessons at the age of 70.

Then in the reign of George II. we have TOBIAS SMOLLET, who died in 1771, was for some time surgeon on a battleship, and took part in the battle of Cartagina. His great work, "Roderick Random," is founded on his life, and he satirises Akenside in "Peregrine Pickle."

JOHN MOORE was a physician of much eminence, forgotten because he made no great contribution to literature, except his now little read "Zeluco." His claim to fame rests chiefly on the fact that he was the father of that great General whose masterly retreat to Corunna saved the situation—a retreat comparable to ours from Mons in the face of vastly superior forces. Moore lived through the French Revolution at Paris, where he was travelling with

his patient Lord Lauderdale. His account as an eye-witness is to my taste better than the more verbose story of Carlyle's.

MARK AKENSIDE.—Another royal physician to George II. and well-known litterateur was Akenside, second son of a butcher of Newcastle-on-Tyne, who, originally destined for the Presbyterian pulpit, became M.D. of Edinburgh in 1745. Akenside must have been a dreadful man, one of that irritable race of scribes which seems to have corns wherever you tread, and his mixture of literature and medicine must have been truly dangerous. He was ambitious to be great in both spheres, and certainly did get some fame in his day. He died more feared than loved, poor and a bachelor, aged 49. His great work is undoubtedly "The Pleasures of the Imagination," which gained the approbation of Pope.

Johnson wrote of it: "His images are displayed with such luxuriance of expression that they are hidden; they are found fantastically under a superfluity of dress. The words are multiplied until the sense is hardly perceived. Attention deserts the mind and settles on the ear." You will find "The Pleasures of the Imagination" maintains the same unvarying level—a high one, but monotonous. I quote as an example from "The Pleasures of the Imagination":—

Akenside: "Pleasures of the Imagination" (Book I., p. 11, line 183).

. . . The high-born soul
Disdains to rest her heaven-aspiring wing
Beneath its native quarry. Tired of earth
And this diurnal scene, she springs aloft
Through fields of air; pursues the flying storm,
Rides on the vollied ligtning through the heavens,
O'er yoked whirlwinds and the northern blast,
Sweeps the long tract of day
* * *
Till every bound at length should disappear
And infinite perception close the scene.

(We wonder almost what *did* happen to the high-born soul!)

These lines bespeak his discomfort of bachelordom (Ode IX., Bk. II.):—

"Though the day have smoothly gone,
Or to lettered leisure known,
Or in social duty spent,
Yet at even my lonely breast
Seeks in vain for perfect rest,
Languishes for true content."

Kipling has some lines about "He travels the fastest who travels alone." It is possible, however, Akenside might have been happier married.

RICHARD BROCKLESBY deserves a place in the Temple of Fame if for no other reason than that he was the friend, benefactor and the frequent medical adviser of Dr. Samuel Johnson, the giant of English literature. He is interesting to us people of Somerset also in that he was born at Minehead and was the uncle of another great man, Dr. Thomas Young, of Milverton, near Taunton. It is to Dr. Young that we owe in a large measure a knowledge of proper spectacles for astigmatism and pioneer work in deciphering the hieroglyphics of the Rosetta Stone. Like many another great physician, he was almost unknown to the general public.

Brocklesby was born in 1722 and educated at Kildare, where he started his friendship with Burke and Buckle. He took his degree at Edinburgh and Leyden and became a Fellow of the Royal College of Physicians. In 1758 he was Surgeon to the English army fighting in the wars of Frederick the Great. In 1763 he returned to London, where he received all sorts of honours. He gave as the Harveian Oration a panegyric on Nathaniel Hodges, one of the many doctors who remained at their posts during the Great Plague of London. (You can read of Hodges in Harrison Ainsworth's "Old St. Paul's," a book which should be read in conjunction with "Pepys' Diary.") Brocklesby was both generous and learned, a benefactor of Burke and Johnson, and lived in the most illustrious circle known in the history of English literature. He is the author of an interesting little book on the "Regular Use of Music in Medicine," and was one of the first of those who dealt with the importance of hygiene in the army. One day Johnson, ill and depressed, quoted "Canst thou not minister to a mind diseased?" Brockleby pleased his patient by readily answering, "Therein the patient must minister to himself." Verily to have been a benefactor to three such men as Johnson, Burke and Young (to whom he left his fortune), to have shared their conversation, and to have enjoyed their esteem, is perhaps the highest distinction which has ever been attained by any member of the Army Medical Service.

The next group of men were hardly properly qualified doctors, and they have little claim for any medical attainments. I speak of George Crabbe, Keats, Goldsmith and Francis Thompson. The first of these, CRABBE, was born at Aldeburgh in 1754. He was the eldest son of a salt master. At the age of 18 he was apprenticed to a surgeon near Bury St. Edmunds, sharing a bed with the stable boy. (Up to the middle of last century, the future doctor was always apprenticed to a man in general practice—a plan not without its advantages, in that he was not launched *quite* raw on to the long suffering public!) We hear of him next at Woodbridge, under a Dr. Page, and in 1775 he published his first poem, on "Inebriety."

At Woodbridge he probably met Sarah Elmy, his future wife. He saved enough money to start work at Aldeburgh, and was appointed surgeon to a militia regiment; but I do not think he ever properly qualified. Not flourishing there (probably the somewhat primitive inhabitants were too healthy), he went, nearly penniless, to London, and after much anxiety and nearly suffering the fate of Chatterton, got under the notice of Edmund Burke, who had him appointed to the post of chaplain to the Duke of Rutland. From this time he entirely gave up medicine, became an excellent clergyman, a keen botanist, and a celebrated poet, living happily with his Sarah at Woodbridge till his death in 1832, leaving one son, who wrote his life.

Crabbe's strength lies in his characterisation and epigram. He has been well described as a poet to the poor; his own youthful hardships put him in sympathy with the distressed in mind, body and estate. Examples (Vol. II., p. 344):—

"No! let the guiltless, if there such be found,
Launch forth the spear and deal the deadly wound.
How can I so the cause of virtue aid
Who am myself attainted and afraid?
Yet as I can, I point the powers of Rhyme
And, sparing criminals, attack the crime."

The then parish doctor (Vol. I., p. 14):—

"But soon a loud and hasty summons calls.
* * *
With looks unaltered by the scenes of woe,
With speed that entering speaks this haste to go,
He bids the gazing throng around him fly,
And carries Fate and Physic in his eye.
* * *
(He) first insults the victim whom he kills,
Whose murdrous hands a drowsy bench protect,
And whose most tender mercy is neglect."

Quacks (Vol. II., p. 95):—

"But now on Quacks and Gamesters, and they play
With Craft and Skill to ruin and betray:
With monstrous Promise they delude the Mind
And thrive on all that tortures Human kind."

Old Nurses (Vol. II., p. 100) :—

" Then the good Nurse (who, had she borne a Brain,
Had sought the cause that made her Babe complain)
Has all her efforts, loving Soul! applied
To set the cry and not the cause, aside;
She gave the powerful sweet without remorse
The sleeping cordial—she had tried its force;
The Infant, freed from pain,
Rejected Food—but took the Dose again."

His verse is conventional in the manner of the eighteenth century, correct, but with little grace. He imparted into English poetry a note that still has influence—realism. He wrote about real things, not of nymphs.

(To be concluded in our next.)

SOME REMARKS ON MENTAL HYGIENE AND THE PREVENTION OF INSANITY.*

By CAMPBELL MEYERS, M.D., M.R.C.S.ENG., L.R.C.P.LOND.

THE Provincial Inspector of Prisons and Public Charities states in his latest report that on October 31st, 1914, exclusive of the insane patients in the Homewood Sanitarium, at Guelph, there were in the Hospitals for the Insane of the Province of Ontario, 5,986 insane persons.* The total population of this Province, as shown by the last census, is 2,519,907. Hence one person in every 420 of the entire population of Ontario is certified insane. Moreover, the number of patients in the hospitals for the insane is greater than the number in the general hospitals of the Province. The Provincial Inspector of General Hospitals and Charitable Institutions states in his last annual report that on September 30th, 1914, the number under treatment in these institutions was 4,654. Hence 1,332 more patients were under treatment at this period in the hospitals for the insane than there were under treatment from all other diseases in all the hospitals of this Province, including the sanatoria for consumptives. This fact alone clearly indicates the importance and magnitude of the subject. The cost to the Province for the maintenance and capital expenditure of the hospitals for the insane in 1914 was $1,704,699.48, being about one-sixth of the total provincial income.

This appalling and ever-increasing number of insane is surely a subject for careful consideration, and renders the prevention of insanity one of the most important of the humane and economic problems which are before the people of this Province to-day. While a large proportion of the number of admissions to hospitals for the insane are now discharged as more or less completely recovered, there still remain in these hospitals a large proportion in whom the sunlight of reason, and all enjoyment of life, is for ever gone—a vegetative existence in which often apparent physical health is combined with a single defect which produces a result sadder than death. Had the development of insanity been averted, the havoc wrought by the storm of the developed attack on the brains of these individuals would never have been experienced, and the mental integrity never been affected.

The mental suffering in insanity, especially during the early stages of the attack, has been justly said to be unequalled by that of any other disease to which humanity is heir. Nor is the suffering borne by the patient alone, since the relatives and friends must bear a profound grief—often over a prolonged period—when their sympathies and their powerlessness to afford either comfort or assistance makes them devoutly hope, for the patient's own sake, that the physical remains of life itself might be removed.

From an economic point of view the loss to the state is tremendous. The expense of treatment and maintenance is great, extending as it does for some of these patients for over fifty years. More important still, however, is the loss to the state of the individual's capabilities for good and useful work, whatever walk of life he may have previously occupied—a loss which, morally, mentally and financially, it is impossible to estimate. If these facts only had to be considered, the question of the prevention of insanity would merit the most careful thought by all classes of the community.

Much more serious, however, than the appalling number of certified insane at present under treatment in the provincial hospitals is the fact that at least an equal number is each day steadily progressing towards the boundary line of insanity or passing completely over it, while practically no effort is being made to prevent this dire calamity. In other words, instead of the proportion of one to four hundred and twenty, as stated above, as being confined in the hospitals for the insane, there are at least another one in four hundred and twenty of our population who are daily nearing the same disaster without a single hand being extended to help them. (It is to be noted, moreover, that neither the number of the insane in the other provincial institutions, nor the large number of insane in this province who are not there confined, are considered in this connection.)

While the treatment of the insane has advanced by leaps and bounds during the past twenty-five years, no real assistance has been offered to prevent the full development of the disease, and once this has taken place, no matter how skilful the medical aid may be, the restoration to mental health is, at best, liable to be only more or less complete. True, the hospitals for the insane have opened their doors to voluntary patients, but the fact remains that, with rare exceptions, the patients will not decide to enter into these surroundings and associations—a decision, moreover, which is perfectly natural—until the onward progress of their disease leaves no alternative and they simply drift onwards with the irresistible current to the inevitable whirlpool. It is, therefore, clear that if success in treatment is to be obtained for those liable to develop insanity, it must be in different surroundings and with different methods and associations than those in which the insane are treated.

Can insanity be prevented?

The answer is an emphatic affirmative in a very large proportion of the patients. How can this result be best accomplished? The answer here is by two methods, which may be described as (1) General and (2) Special. The former relating to general mental hygiene in the development of the individual, and the latter relating to the active treatment of the patient when symptoms of his condition are beginning to develop.

The general methods to be employed for the prevention of insanity comprise the upbringing of the child, especially in regard to its normal development; a wise degree of education which comprises the avoidance of over-education in unsuitable subjects; a close observance of the laws of eugenics, especially the intermarriage of those exhibiting any mental weakness, or pronounced nervous affection, either in themselves or their forebears; the avoidance of alcohol; the prevention of syphilis (the two latter being especially prone to produce insanity); the cultivation of sound physical health and development by out-of-door sports; and the avoidance of pampering and self-indulgence, which are so prevalent in this twentieth

* *Canadian Journal of Medicine and Surgery*, November, 1915.

century: in short, by the development of those qualities, both physical and moral, which tend to the promotion of the best possible health, in accordance with the rules of mental and physical hygiene.

The special methods are applicable to the earlier stage of the developing disease, and include the steps necessary to obtain proper medical treatment for the condition.

In order to explain how prevention is best accomplished at this stage it is necessary to state briefly, and in a very general way, what class of insanity is most amenable to prevention, and then, what symptoms are to be found which indicate a danger of the full development of the disease.

It must be clearly understood that insanity rarely begins suddenly in ordinary life. The early symptoms in many cases are overlooked, or ascribed to other and especially physical causes, so that in those cases where the outbreak of active insanity is thought to have been sudden, a careful examination of the preceding nervous symptoms would clearly show that, in the large majority of such cases, the disease had been coming on, not only for weeks, but more often for months. Moreover, the advance of modern medical science enables a competent physician to foretell the outbreak of insanity often for weeks in advance, with at least as much certainty as that of any other form of disease. From this it will be readily understood that the outbreak of insanity is often preceded for weeks or months by symptoms which are commonly described as nervous, and the patient during this period is suffering from so-called neurasthenia, or nervous exhaustion. This by no means implies that all patients suffering from neurasthenia do, or will have, an attack of insanity. On the contrary, it is only when this diagnosis has been made that the fear of such a result may be considered, depending entirely, as it does, on the nature, the intensity, and the grouping of the symptoms. In other words, while neurasthenia frequently exists without any actual danger of insanity, insanity is rarely present in ordinary life without preceding neurasthenic symptoms, often of long duration. (An exception is found in the present war, where the mental strain and the shock of shell fire, etc., has been so great that mental derangement is often sudden in its onset.) It must also be carefully remembered that once insanity is fully developed it is too late for preventive measures, and that treatment in a hospital for the insane becomes generally imperative. Hence, treatment in an early state, when the symptoms are those of nervous exhaustion not only will, in the majority of cases, avert a developing insanity, but thus also obviate entirely the necessity for asylum treatment. Again, there is no doubt that the strain on the mental faculties of an individual who is obliged to pass through an attack of insanity, is liable to leave him—even when discharged as recovered—with more or less mental deterioration, so that he would be considered "not the man that he was." This unfortunate result would also have been obviated and the development into insanity been prevented by early treatment.

It must not be overlooked that insanity is a definite disease, having its origin in the higher centres of the brain, which is the chief organ of the nervous system, and that its location here is liable, especially in the early stages of the disease, to influence any or all of the functions of the various internal organs, since these depend primarily upon the nervous system for their proper performance. This explains how the various physical processes, such as menstruation, digestion—both in the stomach and intestines—the secretions, and the action of any or of all internal organs, may be affected when their centres in the nervous system become impaired in their functions, as is so often observed in neurasthenia.

As to the class of insanity most amenable to prevention, it can fortunately be stated that one of the most frequent and important forms of this disease belong to this category—viz., that functional form which occurs in adult life, among persons who have previously enjoyed good mental health, and have already accomplished a fair share of life's work in proportion to their age, and in whom the symptoms usually follow such causes as overwork with anxiety, intense mental strain under adverse circumstances, or some pronounced nervous shock. That this form of insanity can be prevented in 75 per cent. of all the cases, when treatment is commenced sufficiently early, has already been clearly demonstrated by a practical experience of many years which were devoted to this purpose.

Before discussing the various symptoms it should be clearly understood that the symptoms of which a patient complains in neurasthenia are always as real to him as those of any ordinary physical disease. Because we often cannot see or locate any visible cause externally for the symptoms, we have become prone to doubt their existence. The prevalent conceptions of any pronounced illness have for so long been associated with pallor, weakness, emaciation, and other physical signs in the patient, that it has been a natural mistake, when judging only from the possible lack of external physical signs of disease, to consider that all the symptoms of a neurasthenic are voluntarily intensified or even imaginary. Were the truth recognised it would be seen that many of these patients struggled long to overcome their symptoms, but were unable to do so. It is this lack of knowledge, conjoined with a hasty conclusion, which is apt to lead many to think that the patient could do differently if he chose, or be quite well if he only believed it. If these persons would only consider that they themselves may one day be obliged to pass through the same ordeal as many unfortunates are doing in every quarter of the world to-day, the injustice and the unkindness of this view would be at once apparent to them—no one is immune. Moreover, in the discussion of the symptoms which follow, it is assumed that the patient has previously enjoyed good mental health, and the grouping of the symptoms here given, whilst purely arbitrary, is intended to indicate how their symptoms, when untreated, may become gradually intensified from a comparatively simple nervous affection in the early stages to a most pronounced disturbance of the functions of the brain—a fully developed insanity.

The symptoms, of which only a limited number may be mentioned here, comprise—especially in the early stages—complaints of disturbances of the various physical processes, such as are mentioned above, of which functional disturbances of the generative system in women and the digestive system in man, are the most frequent offenders. These symptoms may be accompanied in their onset by noticeably nervous symptoms, which later, unfortunately, in the past have been too often regarded as "reflex" in their origin from the physical disturbances, instead of being recognised as definite evidence of the general nervous condition. As the disease advances, the nervous symptoms gradually become more evident: sleeplessness develops, and this is often attended by disturbing or horrible dreams, the patient awakens tired and unrefreshed in the morning, even after a fair night's sleep. Undue irritability is often present, with a decided tendency to worry over trifles, loss of confidence, and marked indecision—the simplest questions being solved only after much difficulty and hesitation; an inability to concentrate the mind for any

length of time without an undue effort, which is followed by intense fatigue; reading an ordinary article, as in a newspaper, may be difficult, and the patient cannot remember or enjoy what he reads, the emotional equilibrium is easily upset, so that a strong man will shed tears without any apparent adequate cause; the lack of confidence in himself may extend to his surroundings, so that his sense of security is lacking, and fears of various kinds arise, such as the fear of being alone, or in the dark, or in open places, etc., these fears being as real to the patient, on account of his condition, as though some immediate danger were actually present; any mental effort may be commenced in good form, but rapid exhaustion follows; a lack of interest gradually develops in the usual affairs of life, and he becomes increasingly introspective; depression may now appear, at first slight and only occasionally, being easily shaken off, but later it returns with greater force, and the patient is only able to rid himself of it by a stronger voluntary effort; the courage, brightness, energy and optimism, which had characterised the individual previously, are now steadily diminishing, and he gradually begins to feel doubtful about his recovery; the ordinary affairs of life no longer interest him as they did formerly; his intellect is as clear as ever, but he is unable to sustain any prolonged intellectual effort; the daily work, which hitherto had been done cheerfully, now becomes an ever-increasing drudge, and finally is no longer possible. The patient realises all these changes, and does his best to rid himself of them, especially with the help of friendly advice, but he can only do so temporarily, as they constantly return with increased force.

It must be here noted that the above symptoms have all increased gradually in their intensity, and may have occupied months of time from their onset to this stage of the disease.

All these symptoms, which are termed psychical, indicate a diminished resistance and a disturbance of function of the higher centres of the brain, and are just as characteristic of a disturbance of the cells in these centres as a yellowish discoloration of the skin is of a certain disturbance of the cells of the liver. Efficient treatment at this stage of the disease would result in the recovery of 80 per cent. of the patients.

If we now suppose the disease has not been efficiently treated, and that in its onward progress all the symptoms have steadily become intensified, what will be the next stage? The sleep has become less and less, until the patient often believes he gets little or none; the inability to concentrate the mind has increased to such an extent that the simplest duties are performed only with difficulty; the depression has become more marked and constant, so that while the patient may be induced to smile from time to time, the hearty laugh of former times is no longer heard; he is more discouraged about his prospect of recovery, and, owing to his inability to work, he fears his usefulness in life has passed, and that he will become a burden to his friends. At this time thoughts of self-destruction flash across his mind, but are promptly dismissed from ethical or moral reasons. While discouraged about his recovery, he still clings to the hope of getting better, and desires to do so. At this stage his disease has become much more serious, and the outlook for the prevention of an attack of insanity much less bright than before. It may safely be predicted, however, that treatment will still save 50 per cent. of these patients.

If we pursue the onward course of the disease still further into another stage we find that the inability to concentrate the mind has led to a state of habitual distraction; the discouragement has become more intense and the futility of trying to prolong his existence is ever present with him; at this time thoughts of suicide as the best means of escape from his trouble are constantly with him, and he is unable to rid himself of them; they steadily assume a more definite form and either a deliberate attempt to take his own life is made, or on a sudden impulse he ends the scene. Should this not occur, or have been unsuccessful, the symptoms grow steadily more marked; he finds that all interest in his family has disappeared, his entire thoughts being centred on his own misfortune, which is steadily becoming greater; the fears he had earlier in regard to external objects gradually extend to imaginary evils, and he is terrified by them; he asks himself why this great misfortune has come upon him, and tells himself it must be for some great evil which he has done which has caused God, and all his friends, to desert him; or he may hear a voice in the stillness of the night telling him of dreadful things about to happen to himself, such as being burned in a fiery furnace, or suffering some horrible torture, etc., the reality of which to the patient is often very evident from his actions.

During this stage the patient has passed over the boundary line of insanity, and even the friends can no longer conceal the truth from themselves, and they awaken to the dreadful reality that his disease has so far progressed that treatment in a hospital for the insane is often the only alternative which remains.

As the above symptoms are different from those of ordinary physical disease, so must the treatment be different, if it is to be successful. The first essential is to remove the patient from the surroundings in which his trouble developed, and to place him under the charge of a physician in whom he is entitled to have confidence. If the patient remains in his own home, or his usual surroundings, the pernicious influences which induce his disease still remain to produce further irritation and thus counteract the benefit of his treatment. Moreover, in a patient's own home, where he or she has been accustomed to direct, it is doubly difficult to give up everything to follow the prescribed course of treatment. Again, the visits of friends in the home, be such either social or business friends, disturb the necessary mental quietude of the patient, and these friends may often suggest, in all kindness, other remedies or other plans of treatment which, from their disturbing effect on the patient, are often most harmful to his progress. Again, a home is not provided with the facilities required for successful treatment, and these can only be had in a hospital devoted to the purpose. A most frequent mistake is made by taking half-measures, which are nearly always failures, and a more severe stage of the disease has to be contended with, owing to the time which has been wasted and the further discouragement to the patient which has ensued. It is much better in this, as in other affairs of everyday life, to make a business of it and succeed. It is often suggested that as the patient is only nervous a little rest and change is all that is required. While much depends, of course, on the symptoms at the time, it is always well to remember how the disease *may* progress, and be governed accordingly.

The nursing of these patients is most important, and requires a long experience with these conditions to be really efficient. The problem of being nursed by a near relative is often present, but of this it may be said that however serviceable such might be in a patient suffering from an ordinary physical illness, the result here is usually unsuccessful, owing to the special type of disease; and the nurse often breaks herself down without having in any way improved the patient's condition.

Hence, removal from home is usually imperative if the disease is at all severe, and once this has been done, it is better to keep the patient out of touch with it (except to know that the family are well) until he has made some decided progress on his way to recovery.

Once the patients find themselves in surroundings in which they have confidence, where every detail of their treatment is carefully planned for them without any effort to decide for themselves, and where the knowledge of such conditions on the part of the attending physician assures every confidence in him, they will at once experience relief from their symptoms, and will be only too willing to carry out all treatment, feeling assured that they will soon return home fully restored to health.

[At the meeting of the Ontario Medical Association, held in Peterborough, May 25th-28th, 1915, the following resolution was moved by Dr. Meyers and seconded by Dr. Hamilton: "That this Association desires to place itself on record in favour of active steps being taken immediately for the prevention of insanity by the establishment of separate Neurological Wards in general hospitals, especially in those hospitals in which clinical teaching is given." Carried.]

THE VALUE OF SYMPTOMATIC DRUG TREATMENT.*

By JOSEPH L. MILLER, M.D.,
Chicago.

As compared with a few decades ago, drug therapy occupies a less prominent place in the treatment of disease, and inasmuch as most of our medication is symptomatic in character, it probably means that symptoms are less frequently treated than in former years. Is this to be considered a step in advance, or are we, on account of our interest in scientific medicine, negligent of an important detail in treatment? It is probably true that with the development of specific drug therapy and biological products the physician has become more impatient with and less interested in treatment directed towards giving only temporary relief. Other important reasons, however, must be considered. The profession each year contains more and more men with careful scientific training. This training may have led them to scrutinise more closely all methods of treatment through carefully controlled observations. The advance of pathological physiology, pharmacology, and experimental therapeutics has furnished them with certain knowledge, and especially a new method of applying it. As a result of all this there has developed, as it appears to the writer, a certain healthy scepticism in regard to drug therapeutics.

Certain points should be considered before undertaking any symptomatic treatment. A few that might be mentioned are: Should this particular symptom be corrected? Does it interfere or assist in bringing about improvement or recovery? Will its modification interfere with making a correct diagnosis or obscure observation upon the progress of the condition? Having determined that a certain symptom should be treated, it is necessary to determine, if possible, the underlying pathological physiology and then the agent to correct it, not merely the chemical agent but the necessary dosage and frequency with which it should be repeated in order to bring about the desired effect. To attempt to lower blood-pressure, at least under certain conditions, may be poor therapeutics; as, for instance, when due to increased intracranial pressure, when the rise in blood-pressure is an effort to avoid cerebral anæmia. It is not improbable that hypertension of renal origin is an effort to increase the efficiency of a pathological kidney. Drug antipyretics, on account of their depressing action, have been largely abandoned in the treatment of prolonged fever. The recent investigation of Rolly and Meltzer and Ludke and others raises the question whether any method of artificially lowering temperature is desirable, as according to their experiments at least a certain degree of fever favours the development of immune bodies. Before undertaking symptomatic treatment it is wise to consider the compensatory resources of the body and not confuse compensatory action with what is commonly regarded as a disease symptom.

In the severe acute infection, if we decide that the centres in the medulla are not functioning properly, can we modify them by certain drugs? We are taught by the pharmacologists that strychnine quickens and deepens the respirations and stimulates the vasomotor centre, causing slowing of the pulse and a rise in blood-pressure. Now, if these same results were produced at the bedside upon these centres, rendered abnormal by toxins, we would have in strychnine a valuable symptomatic remedy. Whether under the conditions mentioned, and in the usual doses, strychnine stimulates these centres sufficiently to bring about any appreciable improvement is exceedingly doubtful, as shown by the observations of Cabot, Newburgh, and others. We must therefore conclude that either our conception of the pathological physiology is incorrect, and the recent work of Newburgh indicates that in this particular illustration this may be the case, or our pharmacology is at fault. Symptomatic treatment, however, when applied to the correction of undesirable symptoms by agents that have been demonstrated to correct this disturbance is strictly scientific, and in this respect is placed at once on the same level as specific therapy.

There is another group of conditions in which symptomatic treatment is not only strictly indicated but in which the agents are at hand to give relief. Morphine, when administered to a pneumonia patient with acute pleurisy, not only relieves the pain, but deepens the respiration, improves the oxygenation of the blood, promotes sleep, and thus becomes far-reaching in its results. In an acute attack of pulmonary œdema, morphine is often of considerable value, in a measure due to its relieving the patient's fears and thus lowering the arterial blood-pressure and so permitting of a restoration of function of the left ventricle. Morphine in acute biliary or renal colic relieves pain, and at the same time relaxes muscular spasm, thus allowing the calculus to escape. Adrenalin, by relieving bronchial spasm, may abort an attack of bronchial asthma. Angina pectoris, when due to spasm of the coronary artery, may be relieved by the nitrites.

There is another group of conditions in which symptomatic treatment may give only transitory relief, but when combined with other agents may give prolonged relief. This form of symptomatic treatment can only be considered scientific when associated with these additional measures; as, for example, digitalis, although claimed as a functional remedy, is nevertheless given to relieve symptoms, as, for instance, dyspnœa. Alkalies are of value in relieving gastric hyperacidity. The digitalis, however, should be combined with restriction of physical exertion and the alkalies with the proper dietary measures in order to give lasting results.

Outside of the symptoms that can be placed in these groups mentioned, or others of the same rational character, there is another group the treat-

* *American Journal of the Medical Sciences*, December, 1915.

ment of which at least to-day cannot be considered as proved rational therapy. Here might be included the value of salicylates in acute arthritis, of expectorants, of bitter tonics, of arsenic in anæmia, and of drugs used to control hæmorrhage. It is in this field that the clinical therapeutist can render real service. Here a process of elimination is necessary in order to place therapeutics upon the same high plane as the other branches of medicine.

In addition there is a long list of drugs employed symptomatically proven to be without value, mentioned or recommended still in modern high-class text-books. As an example we might name hexamethylenamin, which rapidly acquired a reputation as having bactericidal properties throughout the body, and when administered by mouth to appear in the form of formalin in the various excretions and secretions of the body. It is still extensively used in respiratory and ear infections, in meningitis, arthritis, and cholecystitis; although it has been clearly demonstrated that the hexamethylenamin is only split up and formalin set free in an acid medium, and of the various secretions the urine is the only one which is acid.

In order to determine the value of symptomatic treatment it is very essential that the observer be familiar with the course of untreated disease. Individual variations must always be taken into consideration. Many patients with pernicious anæmia grow progressively worse, others have prolonged periods of spontaneous improvement, the latter offering a dangerous pitfall for the unwary therapeutist. Perhaps in the teaching of clinical therapeutics it would be wise to instruct the student first in the course of untreated disease; if possible to follow a few cases in the ward, tabulating symptoms, their intensity and duration. He would thus be impressed with the importance of carefully recording symptoms. He would thus be in a better position to determine the effect of therapeutic agents, and so avoid the error of acquiring experience in clinical therapeutics in a haphazard and time-consuming manner. For the purpose of arriving at accurate information too much stress cannot be laid upon the statistical method of which Dr. Osler has always been a strong advocate. While the impression of our therapeutic accomplishments may be more pleasant to consider, it is carefully collected and recorded information that is of lasting benefit to medicine. Our therapeutics can be placed upon the same accurate basis as pathology and symptomatology. Symptomatic treatment is most important not only from the stand-point of the patients, but also for the purpose of clearing up the field of clinical therapeutics, and he who undertakes a careful study of symptomatic therapeutics will be rendering a lasting service to medicine.

THE CENTENARY OF THE BIRTH OF DR. CRAWFORD WILLIAMSON LONG, THE DISCOVERER OF ETHER ANÆSTHESIA.

By GEORGE FOY, M.D., F.R.C.S.I.

THE Commonwealth of Georgia has recently celebrated the centenary of the birth of Dr. Crawford Williamson Long, the discoverer of ether anæsthesia. Georgia, however, did not wait until to-day to honour the memory of Dr. Long: twenty years ago the Commonwealth named Alexander H. Stephens, the Vice-President of the Confederate States, and Dr. C. W. Long as the two citizens of the Commonwealth she deemed most worthy of statues in the Hall of Worthies at Washington. The two men were warm personal friends, and both held appointments under the Confederacy. The Legislature of Georgia claimed the honour for Dr. C. W. Long, as one who had removed the primæval curse from womanhood and freed surgery of the stigma of cruelty. One of Marion Sims' first pilgrimages was to Long's grave, and one of his bitterest regrets was that he had not known the man who had robbed childbirth of its terrors and surgery of pain. Writing of which, M. le Dr. Cabanès, in his classic monograph "Les Premiers Âges de l'Anesthésie," remarks "C'était trop de gloire pour un seul homme." From the earliest dawn of history we can trace the untiring search for a something to rob injuries of pain. Man has been interrogating Nature to force her to reveal the anæsthetic which would destroy pain and blunt consciousness. All people felt the want and sought for a remedy. Dangerous and even violent means to attain the desired end were sometimes adopted. The Assyrians compressed the jugular veins forcibly against the spine and thus produced loss of consciousness and loss of sensibility—a method, if not identical with garotting, very similar to that one-time method of robbery with violence. A less violent, though equally dangerous, process was the inhalation of the Mephitic vapour introduced into Egypt prior to the days of the Shepherd Kings of the Valley of the Nile. The somniferous vapour of Theoderic, inhaled from a warm, moist sponge, was in its many different formulæ a favourite anæsthetic from the days of the Greek physicians to the end of the fifteenth century, and from it Shakespeare probably took the hint for his friar's potion, which was the undoing of Juliet. The anæsthetic effects of mandragora were, experimentally and probably for the last time, utilised by the late Dr. Richardson, of London. When assisting Dr. Beddoes in his laboratory at Birmingham, William Higgins foretold that a safe anæsthetic would be found in the alkyls of the ethyl series. The writings of both Bryan and William Higgins are pregnant with thought. William was one of a brilliant company of chemists, which included Priestley, Lavoisier, Cavendish, Berthollet, Dalton, Dumas and others, and we may safely say that had William Higgins not discovered and demonstrated the principle of valency, Priestley's discoveries would have been sterile and his contemporaries unknown.

It is interesting to note the gradual approach to success of scientific investigators, and to note their tendency, like Bunyan's pilgrim, to leave the narrow path for the pleasant by-paths, where all their labour becomes nought. Beddoes and Watt and Priestley, and we may add Richard Edgeworth, strove energetically to harness Priestley's brilliant discovery as a therapeutic remedy for almost all diseases. Simple and compound gases were produced, thanks to Higgins' meticulous care, in a state of purity, and freely tested in Birmingham and afterwards in the famous Hotwells Hospital at Clifton, Bristol. The scheme ended in disaster, and the reputation of the Hotwells establishment survives on the casual inhalation of some nitrous oxide gas by Mrs. Beddoes, *née* Edgeworth, of Edgeworthstown, Co. Longford. At her suggestion, Humphry Davy, formerly an apprentice to Mr. Borlax, surgeon, of Penzance, inhaled the gas to relieve the toothache, and modern anæsthesia was born. As might be expected, many Bristol ladies found their way to Hotwells and visited the laboratory of the scientist and philanthropist, and, like all daughters of Eve, were a bit curious. To one and all Mrs. Beddoes and her husband were so kindly disposed, and gas inhalation formed the principal item in their entertainment. "The young man," as Mr. Watts describes Mr. Humphry Davy, administered the gas, and, as a rule, selected N_2O (nitrous oxide).

Though few knew it, and he himself discredited the idea, Dr. Beddoes was seriously ill, nigh unto death, and was working under conditions which would be considered incredible were they not verified by his autopsy. Hotwells was closed; but the amusement, for so it came to be considered—of inhaling nitrous gas survived and extended to the cities of the U.S.A. Medical students of the Edinburgh school made the practice popular there. Gradually, here and there, some stories of deaths occurring from the gas inhalation got about. Professor Mitchell's "Chemistry," published during the fright period, announced that nitrous gas was poisonous. This and the fact that the apparatus for producing the gas was expensive, caused a search for a non-poisonous and less expensive inhalant. Cullen was then the dominating therapeutist and clinician, and he recommended inhalation of ether as a stimulant and to relieve pain. The recommendation was approved of by Pareira and by Rush and other leaders of opinion in America. The inhalant required no apparatus and its cost was not prohibitory. C. W. Long, a student of medicine at the Jefferson College of the University of Pennsylvania —the University favoured by Southerns—saw the "ether freaks," and recognised that they were free from the toxic properties Mitchell ascribed to nitrous oxide (toxic action due to the impurity of nitric oxide gas, which had not been removed), and had both inhaled the ether vapour and administered it. When qualified and settled in Jeffersonville, Georgia, the young people of the district solicited him to administer nitrous oxide gas to them. This he could not do, as he had no apparatus, and there was no mechanic capable of making one within a hundred miles of him—an immense distance at a time when railways were not and Georgian roads hardly more than bridle-paths. Being, however, willing to oblige his friends, he suggested ether. His suggestion was adopted, and all the whites from the surrounding plantations came to the Jefferson surgery, and "inhalation parties" became as popular as "corn cake dances." Dr. C. W. Long was not unobservant. Indeed, he had to be observant, for his visitors were the children of the neighbouring planters, and in the thirties the attendance on a plantation was to the Southern physician much the same as a good dispensary is to an Irish doctor. Fortunately for us, Dr. C. W. Long tells his own story in a letter to his friend Dr. L. A. Dugar, of Augusta, Georgia. "S. Ether was used by inhalation for its exhilarating effects in Jefferson . . . in 1840 and 1841. . . . I observed the fact that myself and others, while etherised, were insensible to pain—from not suffering pain from falls and injuries which would have produced pain in persons not etherised. . . . I made inquiry of every person who inhaled ether in my presence and received injuries in regard to their insusceptibility to pain while etherised." At this time Dr. Long was visited by Mr. James Venables, a middle-aged gentleman, living in the vicinity of Jeffersonville. He selected Dr. C. W. Long, the grandson of a veteran of the War of Independence. Mr. James Venables was anxious to have a tumour of long standing, of an unpleasant tendency to become large, removed, but he dreaded the knife, which up to this was immovably linked to pain. From Dr. C. W. Long he heard that etherised persons felt no pain from wounds and that etherisation had not occasioned any death. Without further delay, Mr. James Venables consented, and on March 30th, 1842, Dr. C. W. Long successfully removed the tumour from Mr. James Venables' neck. The operation that revolutionised surgery and banished pain from labour-beds and operating theatres was performed in a small surgery in a hamlet in the Commonwealth of Georgia. What suffering that induction of Dr. C. W. Long prevented; what lives it saved; what a factor it became in medical progress, is beyond the wit of man to say. Long saw its beneficent effects in the four years' Inter-States war, and we see it to-day in the Great War; and millions who never have heard of C. W. Long bless the means which preserves their kith and kin from the agony of pre-anæsthetic operation. Dr. C. W. Long was now suffering from the dread of having unconsciously hypnotised his patient, and that by suggestion the operation had been robbed of its pain. Peripatetic professors of hypnotism were going through the States south of the Potomac, and were certainly exercising an influence over silly individuals of both sexes, both African and American. His contemporaries strongly advised him to discontinue ether inhalations. He, however, felt that ether, when inhaled, produced anæsthesia, and he determined to give the drug a further trial. Six consecutive operations were performed under ether, and no untoward result, although in each case he gave the anæsthetic and performed the operation. He felt that the time had come to announce the glad tidings for which humanity had waited and longed for many centuries when the, to him, startling news came that on October 11th, 1846, at the Massachusetts General Hospital, Boston, Dr. J. C. Warren, in the presence of Drs. Mr. J. Bigiow, A. A. Gould, Samuel Parkman, S. D. Townsend, and George Hayward, had performed an operation on a patient under "letheon" administered by Dr. W. T. G. Morton. On the strength of this case Morton and his confrères claimed that the blessing of anæsthesia came through him, Dr. W. T. Morton. Of all those present not one knew of C. W. Long's existence, or of his operations on etherised patients. Of the operation itself I transcribe the official report issued by the hospital:—

"Gilbert Abbott, age 20, painter, single. Operation by Dr. Warren. The patient having been placed in the operating chair in the amphitheatre, an incision, two and a half inches in length, was made over the centre of external tumour, just beneath the edge of the jaw, extending through skin and subcutaneous tissue. A layer of fascia was dissected off and disclosed a congeries of large veins and small arteries. Hæmorrhage was slight, no vessel requiring ligature. A curved needle, armed with a ligature, size No. 6, was passed under the mass, and the tumour included, under a knot with considerable compression. The wound was then filled with a small compress and lint, and the patient returned to bed.

"Patient continued to do well, December 7th; cicatrix perfect; tumour same size as on entrance."

Can it be said that this operation, on which Morton built his reputation, is anything other than a very minor one? No bleeding—prior to the days of the clip forceps; a skin and fascia incision and the pedicle tied. Eight weeks after the patient discharged; tumour same size as on admission. And this operation was performed four years and eight weeks after Dr. C. W. Long's, who had to cut through the dense, tough skin of the back of the neck.

During the war, Dr. C. W. Long was placed by the C.S.A. Government in charge of the Athens Military Prison Hospital, where prisoners from the U.S.A. army were interned, and it speaks volumes for Dr. C. W. Long's kindly nature and skill to know that on the cessation of the war the U.S.A. Government asked him to retain his appointment, and thanked him officially for the care, kindness, and skill he had bestowed on their wounded. Dr. C. W. Long is, probably, honoured in the way which would have been most gratifying to him: a

medallion portrait is attached to the front of the Jefferson Medical School, a handsome stone monument is placed opposite the site of his surgery, in which he operated on Mr. James Venables; in Athens, Georgia, a splendid statue marks the place where he lived; and in the Hall of Worthies of the U.S.A. his statue is allotted a place beside that of his life-long and intimate friend Alexander Stephens. As an Irishman I feel proud of his descent. The history of modern anæsthesia is a curious record of strange coincidences. Mrs. Beddoes' toothache makes known the analgesic powers of nitrous oxide; the careless manufacture of nitrous oxide introduces ether; the want of roads and the absence of mechanics in Georgia compels Long to use ether; but without his accurate observations and his sound deductions from them the world might have waited much longer for the inestimable blessing of anæsthesia.

SPECIAL REPORTS.

THE INSURANCE ACT IN BEING.—III.

PANEL PRACTICE.

By DELTA.

Let not the country mock their useless toil,
Their homely ploys, their salary secure;
Nor doctors hear with disdainful smile,
Their forced and simple panels for the poor.
—*The Moxford Book of English Verse.*

A CELEBRATED critic once laid down that all parody has in its nature the essence of original sin, but medical men will feel that in Mr. Stodart-Walker's delightful lines on the House of Commons the glamour of transgression appeals seductively, although the "panels" are not altogether for the "poor." . . . Some doctors may greet them with the disdainful smile, some with a deeper emotion, and most with, by this time, philosophic acquiescence. Among the last group are many whose acquiescence is based upon entire satisfaction. The man who has been receiving threepenny fees—there are such—is glad enough to exchange such remuneration for the fixed capitation fees of the Act, and so is his more largely represented brother who has only been paid at club rates which could not possibly reward even the time, apart from the question of skill, spent on his patients. To such the Act has meant the difference between a continual struggle and, if not wealth, at any rate a competency. It is a matter of regret that these practitioners in some cases have actually continued to run private sick clubs, at the old starvation rates, for the dependents of their panel patients, a suicidal policy in view of the possible inclusion of this class of patient within the scope of the Act. It will be hard indeed then to convince the Commissioners or the public that the men who have persisted in underrating their work should not be taken at their own valuation. This contingency would matter little did it not threaten to involve the more honourable majority in a similar underpayment.

It is difficult to say how the average practitioner, with his middle-class and well-paid artisan clientèle of private patients, and a practice eked out by a sprinkling of clubs in the pre-Insurance days, has fared. The transfer of many private patients into the Panel ranks has been generally a source of loss, set off by the fact that many people whose payments were uncertain are now paid for by the Panel fees. From such enquiries as I have been able to make and a study of the press literature of the subject, it would appear that little difference on the whole has resulted, the difference being not infrequently on the debit side. It must be remembered that for a proper comparison of the ante- and post-Insurance conditions, a long series of years must be taken, and only three years of Insurance practice have yet elapsed. Moreover, and above all, the increase in the number of contract patients inevitably means more work done in proportion to payments, for it is a universal experience that any sum of fees from contract and private patients respectively represents far more attendance on the contract patients, who are more numerous, and ask and get more done for them in proportion to the remuneration received. In other words, the Panel doctor may be making more fees, but the extra work demanded is out of proportion to those fees—a little more money, a lot more work. And to this must be added the great increase in clerical work, records, certificates, tuberculosis returns and correspondence, cards to be completed and forwarded on accepting a patient; while the best of men can hardly hope to escape for ever the correspondence and trouble connected with a complaint, however unfounded. In one class of practice, however, the doctor has lost considerably by the Act. Many men formerly reckoned among their patients the servants of a mansion or country seat, several such establishments being included in their practice. For their attendance on these employees the master of the house willingly paid such a fee as might be considered due to a member of a liberally educated profession, the fee varying from 7s. 6d. to half-a-guinea. Now these cases are merged in the Act, and with them a certain amount of the position, prestige, and independence of the practitioner.

As for those doctors who were unable to persuade themselves that their B.M.A. Pledge, given under certain circumstances, might not be revoked when those circumstances had been greatly modified or reversed, they have paid the price of honour. Whatever may be said of their conception of honour's demands, there is no one who will not sincerely respect their adherence to that conception and regret the losses it has enforced upon them. Apart from losing so many Panel patients, it is evident that 14,000,000 patients cannot be redistributed without loss falling on someone.

In contrast with his town brother, the country doctor certainly loses. Owing to the more trying conditions of practice and the generally heavy mileage, it is doubtful if any country practitioner can take over 800 on his Panel list, but this number would be thought little of by many a town doctor. Cases are reported in London where as many as 3,000 have been allotted to one man's list, and 1,000 to 1,500 are common. It is surely an injustice that patients should be paid for at the same rate in both instances, and it may be added that it is a matter of grave doubt whether more than 800 should come on any single list, if adequate attendance is to be obtained. It is without point to urge that the country man gains by being allowed to do his own dispensing. Whatever gain accrues from this is altogether incommensurate. The payment for 800 patients at 9s. is £360, for 1,500 at 7s. it amounts to £525; and it must be remembered that the average country panel is considerably below even this figure of 800, taking in both cases single men and excluding partners. Moreover, the country practice will be the more expensive to work.

Whether for better or for worse, the Act has standardised what has hitherto been known as club practice. This can only be justifiable if that kind of practice has been raised in aim and quality: has it been so raised? That it should be, was undoubtedly the desire of the promoters of the Act. The doctor was to have his attention un-

distracted from his patient by dispensing or by book-keeping—indeed, much was made of this latter point. Can the average doctor, then, give more of his time to his patient under the Panel system? I fear that the answer, as Cabinet ministers say, is in the negative. His distractions are considerably increased in comparison with the old club days. Certificates in plenty, cards to fill in and look up for each patient, as well as to sort and file from time to time, letters to write to sundry officials and others whose appetite for information grows by what it feeds upon, long and prolix circulars to peruse and remember (if possible), Panel Committees and the like to serve upon—all these things do not make for quiet concentration; especially when added to the book-keeping and clerical work connected with his private patients. The consequence, it is much to be feared, is that when the end of the day brings a brief respite from multifarious worries and duties, it is not his professional journal or text-book that the wearied man betakes himself to, but a novel: and who may cast the first stone? Remember that he is the only administering official under the Act for whom no secretary, clerk, typewriter, or book-keeper is provided. Throughout his working hours he has striven to ward off from his charges the grim wolf with privy paw, the struggles alternating with wrestles with the goosequill. Nay, did he not, borne down by the heavy effort to bear his warring brother's burden, petition that "for the duration of the war" records at least should be more honoured in the breach than the observance? Only to be informed, by the cold scratch of Officialdom's pen, that the records could not be dispensed with. Such records including, of course, his military brother's records.

Yet, were all this pen-scratching reduced, one dares not suggest abrogated, what might it not mean to the Panel doctor? At present, I would appeal to such: What is their first thought as their Insurance patients enter their consulting-room? Is it: "Here is a Sufferer to be treated?" Rather is it not, as the doctor's hand goes automatically to the card-index drawer: "Here is another Item to be filed?" My brethren, these things ought not so to be.

Of the provision of laboratory help I may speak not unhopefully, although the grants for this and kindred services have had to be withdrawn. Sooner or later it must come. No doctor under the circumstances detailed—or rather outlined—above, can be expected to make a blood-film or stain a sputum—yet how much might be done by these aids in suitable cases! But time and in many cases even space are wanting; how much more so for the more recondite Widal test and others of its kind. In these matters a lesson ought to be learnt from the R.A.M.C., which calls in the aid of the bacteriologist promptly and reaps its reward accordingly—has not the bacteriologist won some of his most brilliant triumphs in that excellent Corps?

Closely allied to the bacteriologist's help is that which ought to be received, but which at present is not, from consultants, inspectors, referees—call them what you will—appointed under the Act, and not medical representatives of insurance corporations (such latter having, as a rule, no particular standing in the profession). These should deal with the increasing class of the work-shy, the schemer who, being out of work at the time, takes the opportunity to get up some ailment fancied or otherwise to tide him through exigencies, the downright malingerer—all of whom are a problem which the panel doctor ought not to be expected to tackle single-handed, nor to risk those medico-legal complications which will threaten him to exactly the extent proportionate to his faithfulness in discharging his duty. The only "complaint" which the writer ever had to meet—certainly it was dismissed as frivolous, but not until a good deal of time, stationery, and postage, not to mention worry, had been expended—was in connection with signing a certificate for one of these gentry; and doubtless his experience can be paralleled by many others. It is not right that a doctor should be exposed to these risks.

Reverting for a moment to the vexed question of clerical work, there is at least one kind of record, for which space is provided on the back of his record cards, which the panel doctor makes, or ought to make, with a good grace: I mean the clinical notes on involved or interesting cases. At present these notes are lost to him at the end of the working year when the halves of the cards are sent away for tabulation. It is not much to ask that these clinical records should be subsequently returned to their writer after the cards have been dealt with, for the jottings are valuable as clinical references in future consultations. The trouble involved in their return need not be great, and the gain to efficiency is unquestionable.

This article has reviewed, however inadequately, the prospects of the average panel practice, both professionally and financially. But to every practice comes a time when, by removal or decease of the incumbent, a change of proprietorship occurs. How does the practice stand then under Insurance conditions? The writer's answer to this far-reaching question would be worth little, and he has therefore had recourse to the opinion of experts, who have been good enough to give him a reassuring opinion. They point out that the panel has had a good influence upon the sale of practices, because it is a certainty the value of which can be ascertained simply by reference to the local Insurance Committee. Whereas in the old days, in the case of the sale of a cash practice there was little to rely on in the investigation of the books; now the panel foundation constitutes a fixed basis from which to estimate the worth of the practice. These experts state that the average loss of panel members to the incomer is not a serious item in the transfer. Such considerations do not, of course, apply to the transfer of practices in the transition days, for during the inception of the Act's working a practice was bought and sold under a cloud of uncertainty as to the future.

Something must be said before closing concerning the claim that the average earnings of *locums* have been increased by the Act. Excluding the present abnormal war conditions, under which many patriotic *locums* have done their best to bleed dry their brethren, who have gone forth that the *locums* might pursue these venesections in peace and quietness, it is true that *locums* have received larger fees since the Act came in; but it is not always considered that they have raised their terms, being quick to perceive that the passing of the Act meant that their work would be increased. And ample proof can be adduced that it has been so increased. On the other hand, every doctor who has sought a holiday in the years immediately preceding the Act will bear witness that even then the tendency for *locums'* fees to climb up had begun. It was merely accelerated by increasing experience of the Act.

BRIGADE SURG. LIEUT.-COL. JOSEPH FLEMING, M.D., F.R.C.S., Army Medical Staff, left unsettled personal estate in the United Kingdom amounting to £20,316.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

QUACKERY AND THE ETHICS OF JOURNALISM.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—All your readers interested in this subject will thank your correspondents, "A Student of Sociology," and "Anti-Cant," for their letters in your issue of January 5th. "A Student of Sociology" tries to get at the root of things, and makes plain what many of us may have overlooked, namely, the fact that the vast system of swindling carried on by quacks of all denominations merely forms what is called "the last word" in the vaster system carried on by followers of the cult of "neo-commercialism." Except in so far as it ought to intervene to prevent victimisation of unbusinesslike medical men by City Sharks, the subject of commercial fraud hardly lies within the scope of medical journalism. The Shark is only one degree less hurtful than the medical quack. The one robs the simple public and often breaks the hearts of his dupes, the other not only robs, but trades upon the health and the life of those who often because they are suffering are led to confide in him. Success of financial fraud depends upon advertisement. The Prelates of our Churches of Intercession Day all spoke of the hope of that national regeneration to follow the war, of which "A Student of Sociology" treats. The hearts of at least the majority of our people are sound enough; let us hope that they will set to work when the time comes to cleanse the community from the dregs which society by its neglect has made accumulate, and that they will clear from the surface the froth and the scum which are now too often mistaken for the *crème de la crème*. The statement of "Anti-Cant" fills me with amazement, but I have verified its exactness. I see very few medical papers and never by any chance look at their advertisements. There may be a score or more of high-class medical magazines and papers published in London and the country, including several medical school journals. It is a fact that at present in the majority of these there are to be found quack advertisements which even respectable lay papers ought to reject. I will allude to two only of these advertisements. One is among the most blatant and easily recognisable frauds of the day. It consists only of a mixture of Epsom and Glauber salts disguised and made palatable. It is set forth as a "cure" for 50 or more diseases. No medical man, least of all a medical editor, can need a hint as to the injury reliance upon such trash must often inflict. The other advertisement to which I allude is that of one among many similar now appearing. It is a "tonic" which cures all forms of debility—nervous diseases, insomnia and depression of spirits in every form. I pick out this latter nostrum for remark for the reason that within the last year or so I have received from a medical friend particulars of two cases of a kind which must be now of common occurrence. There are more than a dozen of these "tonics" on the market. The Poisons Act has shut out from them the use of drugs like cocaine and morphia which they formerly often contained. They now hold no potent drugs save alcohol, but this in a dosage so large as to constitute a virulent poison. My friend's cases were one of chronic nephritis, one of diabetes—depression of spirits being the most impressive subjective symptom. After the death in each case it was found that the patients had been taking large quantities of an alcoholic "tonic." In each case my friend communicated with a local coroner, a medical man, but after going privately into the matter the coroner decided that an inquest would be useless, essential points of evidence being obviously unavailable. This is the kind of thing which editors of some medical papers are conniving at. They are also giving sanction to the conduct of their lay brethren. The agents are now able to point out that quack advertisements which may at first be looked at askance by careful newspapers are admitted to first-class medical journals, and managers as business men cannot be expected to refuse them. Moreover, when the time for further promotion of Medical Law Reform arrives, these facts will be used with all artfulness by the defenders of quackery. They will point to the fact that quack advertisements appear in leading medical papers as proof that secret remedies are recognised by the profession as useful or even indispensable adjuncts in medical practice. It is impossible to believe that medical editors can be aware what is being done in their own advertising columns or that they have performed the plain duty of presenting to the owners and managers the Report of the Select Committee on Patent Medicines.

I am, Sir, yours truly,
HENRY SEWILL.

The Old Rosery,
Earlswood Common,
January 6th.

"WHO MADE THEE A RULER OVER US?"

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The B.M.A., I think, deserves the gratitude of the nation for voluntarily trying to organise the medical service of the Army and Navy. The Panel Committees, backed up by the Insurance Commissioners, have also done "their bit," but so far as I can see, no superior authority has appointed either as "ruler over us." I take it the General Medical Council, by its charter, has no control over what work—if any—registered practitioners choose to devote themselves to, so long as it is not "infamous" in a professional sense, and so, if doctors are so very much required, the question arises: Should not the War Office conscript doctors for war service according to their several capacities?

I am, Sir, yours truly,
JAMES HAMILTON, M.D.

Chelsea, January 8th, 1916.

DR. WM. HAMILTON, Boyle, has been appointed a magistrate for Co. Roscommon.

DR, KRAUS, of Buenos Ayres, is reported to have discovered a serum against whooping-cough.

CAPT. B. J. HACKETT, R.A.M.C., on whom the Military Cross has been conferred, was, until he joined the Army, Surgeon to the Mountjoy Prison, Dublin.

COL. GEORGE CONSTABLE GREGORY left £1,000 to King Edward's Hospital Fund, and £500 each to Middlesex Hospital and the Hospital for Women, Soho.

SIR CHARLES AUGUSTUS HARTLEY, K.C.M.G., engineer, of 26 Pall Mall, S.W., who was born at Hedworth, Durham, in 1825, and died on February 20th last, left estate valued at £59,037 gross, bequeathed £300 to the Westminster Hospital, £200 each to Charing Cross Hospital and the Victoria Hospital for Children.

OBITUARY.

DR. ALBERT WESTLAND, M.A.

THE death took place, on December 31st, of Dr. Albert Westland, Aberdeen, at the age of 62. Dr. Westland was a very distinguished student, and graduated in medicine with honours at Aberdeen, taking the degrees of M.B., C.M. in 1875, and M.D. in 1877. He afterwards was, for many years, in partnership in London with Dr. Ford Anderson. Dr. Westland was able to retire from the practice of his profession many years ago, and since then resided in his native city. Although for many years he did not take any active part in public life, he keenly interested himself in everything pertaining to the welfare of the community. He was for a period a member of the Aberdeen Town Council, and wrought assiduously for the interests of the various departments to which he was appointed as a committee man. Dr. Westland at the time of his death was a member of the Aberdeen University Court, elected by the General Committee. In the affairs of the University he took the keenest interest. For some time he was President of the Aberdeen Liberal Association, but resigned about three years ago on account of the Government's attitude to the medical profession in connection with the Insurance Act. He has been in ill-health for a considerable time.

SIR G. S. ROBERTSON, K.C.S.I., M.P., M.R.C.S., L.S.A.

SIR GEORGE SCOTT ROBERTSON, one of the heroes of the defence of Chitral, has died at his town residence in Chelsea, at the age of 64. Sir George, who came of an Orkney family, was born in London in 1852, and was educated at Westminster Hospital Medical School, qualifying L.S.A. in 1876 and M.R.C.S. in 1877. He joined the Indian Medical Service in 1878, and served through the Afghan campaign in 1879-80. Having retired with the rank of Lieut.-Colonel in 1888, he became attached to the Indian Foreign Office, and was continually employed on the Gilgit frontier of Kashmir. Travelling in Kafiristan, he lived for a year among the wild hillmen. In 1893 he led a political mission to Chitral, and two years later was besieged in Chitral Fort by the hill tribes and severely wounded. He gave a thrilling story of the siege in his book "Chitral: The Story of a Minor Siege." The gallantry and determination of Robertson's defence, so important for the maintenance of British prestige, was universally recognised. He was created K.C.S.I., and was made British Agent in Gilgit. Sir George had been Liberal member for Central Bradford since 1906. He is survived by his second wife, a daughter of Samuel Laurence, the painter, and by a daughter.

DR. H. L. ATKINSON, B.A., M.B., B.Ch., B.A.O., ROTHERHITHE.

WE regret to announce the death, as the result of an accident, of Dr. Hugh Latimer Atkinson, of Rotherhithe. Dr. Atkinson, who was one of the most popular medical men in the district, was killed on New Year's Day in the Lower Road, Rotherhithe, where he had his surgery, in a collision between his motor-brougham and a motor-bus. His chauffeur was badly injured. Deceased received his medical training at Queen's College, Belfast, and qualified M.B., B.Ch., B.A.O., R.U.I. in 1891.

DR. T. J. WALKER, who last August received the freedom of the city of Peterborough, was on December 22nd presented with his portrait in oils. Accompanying the portrait was a book containing the names of 750 subscribers, and bearing the following inscription:—"On the completion of the eightieth year of his age, his friends and neighbours presented Dr. Thomas James Walker, Doctor of Medicine, Fellow of the Royal College of Surgeons, Justice of the Peace, Volunteer Decoration, his portrait painted by Fiddes Watt, A.R.S.A., as a token of their esteem and affection. Peterborough, December, 1915."

MEDICAL NEWS IN BRIEF.

Medical Society of London.

THE meetings of this Society will be resumed for the present session on Monday next, January 17th, at 8.30 p.m., when a discussion on "Gunshot Wounds of the Chest" will be introduced by Colonel Sir John Rose Bradford, M.D., F.R.S., A.M.S., Captain Hubert Henry, R.A.M.C., and Captain Morriston Davies, R.A.M.C.T. Lieut.-Colonel W. Hale White, M.D., R.A.M.C.T., Dr. Samuel West and others will take part in the discussion.

The Lettsomian Lectures will be delivered on the following Monday evenings at 9 p.m., February 7th and 21st, and March 6th, by Major F. W. Mott, M.D., F.R.S., R.A.M.C.T., on "The Effects of High Explosives on the Central Nervous System."

The Royal Society of Medicine.

AT a meeting of the Section of Odontology on January 24th, a paper will be read upon "The Significance of the Radiographs of the Piltdown Teeth," by Mr. W. Courtney Lyne, L.D.S.

Lectures at the Royal College of Surgeons of England.

A COURSE of lectures on "The Anatomy of the Body," for first-aid and ambulance students, will be given in the theatre of the College, Lincoln's Inn Fields, by Professor Arthur Keith, Conservator of the Museum, at 5.30 p.m. on the undermentioned dates:—February 14th, 16th, 18th, 21st, 23rd and 25th, March 13th, 15th, 17th, 20th, 22nd, 24th, 27th, 29th and 31st, April 3rd, 5th, 7th, 10th, 12th, 14th, 26th and 28th, and in May on the 3rd and 5th of the month. The course is open to all members of ambulance companies and of first-aid classes. A detailed syllabus of the subjects to be dealt with in each lecture will be issued at the commencement of the course. Anatomical preparations and specimens will be on exhibition in the theatre from 4 to 7 p.m. on lecture days.

Typhoid at the Front.

MR. TENNANT, in the House of Commons on January 10th, in reply to a question by Mr. Thorne, stated that from the beginning of hostilities to November 10th last 1,365 cases of enteric fever were reported as having occurred among British troops in France and Belgium. Of these 1,150 had been diagnosed after bacteriological examination. In 579 cases where there had been inoculation there were 35 deaths, and in 571 cases where there had been no inoculation there were 115 deaths.

Medical Attention for Measles.

AT the last meeting of the Burnley Health Committee the Deputy Medical Officer reported that he had received a circular from the Local Government Board as to the Compulsory Notification of Measles Order, in which was pointed out the necessity for all persons suffering from measles to be medically attended. The Committee decided that the necessary steps be taken to ensure medical attention in such cases, and that when persons so suffering could not afford a doctor a medical practitioner be allowed a fee of 5s. to attend them, such fee to include three attendances and necessary medicine.

Child Mortality at Dewsbury.

THE Dewsbury Corporation passed the following resolution at a meeting held on December 2nd:—"That having regard to the excessive early infantile mortality and the high maternity death-rate prevailing in the borough, the Health Committee be requested to take immediate action by the adoption of such administrative measures as may be calculated to effect some improvement in those directions, and to take such further steps as will ensure definite procedure for putting into operation the recommendations

of the Local Government Board in relation to maternity and child welfare."

This resolution was considered by the Health Committee at a meeting on December 7th, when the Medical Officer (Mr. T. O. Halliwell) was instructed to report to the Committee on the following matters:—

(1) The rate of infant mortality in the borough for each of the five years preceding amalgamation, and for each of the five years following amalgamation, such return to give full particulars of the number of children that died before reaching the age of one week, also each week up to four weeks, and then for each succeeding month up to one year.

(2) The rate of mortality amongst women dying from childbirth for the same periods, giving separate returns (if possible) for married and single women, and showing whether such mortality is of a systematic or incidental character.

The final recommendation of the Committee is that, "if such rate of mortality is found to be excessive when compared with towns of a similar size and character to our own borough, he (the Medical Officer) be requested to advise what further provision is necessary, in his opinion, to minimise such excessive mortality."

Health Record.

THERE was not a single death from scarlet fever in Huddersfield during the past year, which is a unique experience in the history of the borough, and believed to be a record for any town of similar size in the country.

During the year 336 cases of scarlet fever were treated at the Corporation's Sanatorium at Mill Hill. The average death-rate throughout the country for scarlet fever is 3.5 per 100 cases.

Manchester City Coroner.

THE Manchester Corporation Town Hall Committee on Wednesday decided to recommend the Council to appoint Mr. William Sellers, M.D., M.R.C.S., barrister-at-law, to the office of Coroner for the city in succession to the late Mr. A. E Gibson. The commencing salary is £800 per annum. Originally there were 19 applicants. Mr. W. Sellers was for a time Medical Officer of Health to the Radcliffe (Lancs.) Local Board. He was called to the Bar at the Middle Temple in June, 1900, and practised on the Northern Circuit. Later he became Coroner for the Salford District of the County of Lancaster. Besides being President of the Oldham Munitions Tribunal, he is a Professor of Medical Jurisprudence at the Manchester University and a member of the Senate. He is also a member of the Royal College of Surgeons. When the late Mr. Gibson was appointed City Coroner, Mr. Sellers, in the final voting, received only one vote fewer than Mr. Gibson.

How Disease is Spread.

AT the Alfreton Urban Council meeting on January 4th, the Medical Officer reported that whilst scarlet fever was so prevalent in Somercotes some people were very careless, and caused the disease to be spread. One young woman, whilst suffering from the disease, travelled in a closed cab with a soldier to the station. This was a very serious matter, as the soldier at the time was returning to camp and might have carried the disease inside. The Council decided to take action in the case.

Housing Problems.

AT the first Scottish National Conference on Housing, which was held in Glasgow on January 3rd, under the auspices of the Local Labour Party Housing Committee, Mr. William Gallagher, of the Scottish Co-operative Society, the Chairman, characterised the stoppage of the house-rent increases as a great victory for working-class solidarity. He was sorry the public had not acted similarly towards increases in the price of food, clothing and coal.

Dr. Chalmers, the Glasgow Medical Officer of Health, said the quickest way to reduce the price of land in the cities was to cut down the height of tenement houses. The time had come when the abolition of the apartment houses should be considered.

Councillor Wheatley declared that the famine in houses in Scotland could be traced in a measure to combines among the manufacturers of building materials. Private building enterprise had failed. He outlined a labour scheme for free State house-building grants.

British Gift to Canadian Red Cross.

THE Canadian Medical Service and Canadian Red Cross have received a donation of £25,000 from the British Red Cross, to be devoted to the building and equipping of recreation-rooms at Canadian hospitals and convalescent homes now established in England and on the Continent. This may be regarded as a practical acknowledgment of the generosity of the people of the Dominion towards the Red Cross service of the Mother Country.

French Canadian Hospital.

AT the end of this month there will be opened at St. Cloud the French Canadian hospital, the gift of the Canadian Government for the wounded of the French Army. It is the outcome of the meeting between Sir Robert Borden and President Poincaré in August.

Hereford Asylum.

THE new Medical Superintendent of the Hereford County and City Asylum, in succession to the late Dr. Morrison, is Dr. T. C. Graves. The salary is £500 per annum, with emoluments, which are estimated at £250. Dr. Graves entered service at the asylum in April last as Assistant Medical Superintendent, and, owing to the illness of Dr. Morrison, has been in charge during the past six months, Dr. Stevenson, another assistant, having joined the R.A.M.C. Dr. Graves, owing to the difficulty in obtaining another junior, is still working single-handed.

The new Superintendent, who is 32 years of age, has held the following appointments:—House Surgeon at the University College Hospital, London; Obstetric Assistant at the University College, London; Casualty Officer at the London Temperance Hospital; Assistant Medical Officer at the Mile End Infirmary, London; Assistant Physician at the Royal Edinburgh Asylum, Morningside; and Assistant Medical Officer and Acting Medical Superintendent at the Hereford County and City Asylum.

Arrangements for Convalescent Officers in Switzerland.

WE are asked by the Committee of the Public Schools Alpine Sports Club to announce that they have accepted an offer made to them by the Board of the Palace Hotel, Montana (Switzerland), to place that hotel at their disposal, rent free, for the present winter season for the reception of convalescent officers. It is intended to follow this immediately with arrangements for Great Britain. A charge of 6s. 6d. per day to cover cost of food and other expenses will be made to each officer. Friends who accompany them will pay 8s per day. Any balance remaining over after defraying the cost of food, wages, and other working expenses will be devoted by the Committee to defraying the expenses of necessitous officers.

Montana-sur-Sierre enjoys the highest record for winter sunshine of any Swiss mountain resort—7¾ hours of possible sunshine on the shortest day.

All convalescent officers, especially those suffering from bronchitis, pneumonia, and general debility and overstrain, are invited to fill in the enclosed slip and send it to the Honorary Secretary of the Sub-Committee, Lady Waterlow, 1 Maresfield Gardens, Fitzjohn's Avenue, London.

Indian Students' War Service.

MR. C. E. MALLET, in his report on the work of the Indian Students' Department for 1915, says that from August, 1914, onwards the great majority of students at British educational centres responded steadily to

the call for men. University, law, medical, and engineering students volunteered on every side for service, and Indians were as willing as any to take their part in the burdens of the war. A way was found of enabling many Indians in this country to render valuable service in connection with the war by the formation of an Indian Volunteer Ambulance Corps. In all 272 members were enrolled in that body, and 215 officers and men were at one time or another actively employed.

Hospital Saturday Fund.

AT the quarterly meeting of the Board of Delegates of the Hospital Saturday Fund, held at the National Sunday League Offices, it was reported that the total receipts up to December 31st amounted to £26,454, which was an increase of £4,633 on the previous year's total. The accounts do not close until January 10th, and it is expected that the total will be increased by that date to an additional £10,000. The Lord Mayor has consented to act as President during his year of office.

Doctors and Enlistment.

PRESIDING at the Middlesex Insurance Committee on January 3rd, Mr. W. Glyn-Jones, M.P., said the panel committees were being asked how many more medical men could be spared for enlistment. Several of their doctors had enlisted, and he thought it desirable that others should be reminded that under their agreements they had to give notice to the panel committees so that the latter should be satisfied that the panel would not be rendered inefficient, and that satisfactory arrangments had been made.

Kaiser's Corfu Palace as Serbian Hospital.

IT is reported from Athens that the British Government has announced to the Greek Government its intention of taking over the Achilleion, the Emperor William's Palace at Corfu, as a hospital for wounded Serbians.

Generous Russian Offer.

THE following is issued by the War Office:—

"Prince Oldenburg, head of the Russian Red Cross, has offered to place the watering places in the Caucasus and the Crimea at the disposal of the Government for the use of wounded and invalided British officers. The invitation included the grant of a free railway ticket to the officer's destination and free medical treatment. The Government regret that they have been obliged to decline this very generous offer as, under present conditions, access to these watering places is not practicable

Ceylon and the Red Cross.

THE Secretary of State for the Colonies has been Informed by the Governor of Ceylon that a further contribution of £9,325 3s. 11d. has been made to the Prince of Wales's Fund, so that the total contribution from Ceylon now amounts to £39,325 3s. 11d. Two remittances amounting to £3,017 11s. 6d. were also sent to the Red Cross Fund last November.

Heredity as a Factor in Alcoholic Degeneration.

THE Temperance Collegiate Association offer two prizes, of ten and five guineas respectively, for the best essays on this subject sent in by September 30th next. It is stated that strength and clearness of argument, rather than conclusions reached, will influence the examiners; and that original and well-attested evidence will count more heavily than quotations from existing well-known sources. Conditions, with suggestive synopsis and bibliography, may be obtained from the Secretary T.C.A., "Strathblane," Alexandra Park, Nottingham. In this connection the Science and Education Committee of the National Temperance League is willing to consider applications from University and hospital students in physics and medicine for financial assistance in carrying on research or in making investigations. Address the Secretary, N.T.L., Paternoster House, London, E.C.

Royal Colleges of Physicians and Surgeons.

AT the first Professional Examination of the Conjoint Examining Board of the Royal Colleges of Physicians and Surgeons of England, held on January 4th, 5th, 6th and 7th, the following candidates were approved in the under-mentioned subjects—viz.:—

Chemistry and Physics.—V. H. Barker, E. R. Boland, E. Brazao, H. Dryerre, H. M. Gerson, W. Hardman, E. R. Jagger, H. S. N. Menko, G. G. Newman, H. N. Schapiro, W. Walsham, and Octavia M. Wilberforce.

Chemistry.—S. Hazeldine, Madeline P. Parker, G. K. Reeves, and B. R. Reynolds.

Physics.—H. L. Bowen, J. W. Hulme, A. A. Knapman, Margaret O. Meek, and G. F. Smith.

Biology.—V. H. Barker, J. B. Barnett, E. R. Boland, H. Brookman, H. S. Chadwick, S. H. Coplans, C. W. Empey, H. M. Gerson, Kate Glyn-Jones, J. B. Gregor, Ahmed Hamid, E. Hardy, E. R. Jagger, Mohammed Abdul Razzak Khalifa, A. A. Knapman, Margaret Ombler Meek, H. S. N. Menko, H. S. Morris, L.D.S.Eng., J. L. C. O'Flyn, E. A. I. Phillips, Betsey Porter, E. L. J. Reason, G. K. Reeves, I. Resnikoff, and H. N. Schapiro.

MEDICAL WAR ITEMS.

LIEUT. W. FRANK THOMPSON, Royal Army Medical Corps, has died of wounds received in action. Lieut. Thompson was educated at Leys School, Cambridge, and St. Bartholomew's Hospital, and was 28 years of age.

Officers in the Campbell Hospital, 10 Cambridge Square, Hyde Park, include Lieut.-Col. G. A. Troup, Royal Army Medical Corps, and Lieut.-Colonel H. M. Nicholls, Royal Army Medical Corps.

Captain Albert Guy Miller, R.A.M.C., attached 12th Middlesex Regiment, fell in France on December 29th, aged 31 years. A member of an old Australian family, he was the fourth son of the late Albert Miller, of Wheinside, Toorak, Melbourne. After specialising in his profession in England, he offered his services, as a medical man, to the country. He was killed during the course of his duties in the trenches by a grenade discharged from a rifle. He leaves a widow.

Major Frederick Miller Johnson, A.M.C., M.D., who was killed at Anzac on November 29th, was formerly in practice in Melbourne, Australia. He received his medical education at Melbourne,, Edinburgh, Vienna and Heidelberg, obtaining his M.D. at Edinburgh in 1888. Major Johnson was a grand-nephew of the late Sir William Gull, Bt.

Surgeon Douglas Whimster Keiller Moody, M.D., R.N., lost his life in the *Natal* on December 30th. Surgeon Moody, who was gazetted in September last, was educated at Montrose Academy and Aberdeen University, where he took the degree of M.D. He ultimately settled in London, and was for some time the Medical Officer on P. and O. liners. Before joining the Grand Fleet he was a Surgeon at the Haslar Naval Hospital. It was only three weeks ago that he spent his furlough in Hull. Surgeon Moody's great-grandfather, Capt. James Whimster, of the 79th Highlanders, fought in the Peninsular War in Lisbon and Coruña under General Sir John Moore. Captain Whimster also served in Wellington's campaigns.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad.

Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada. For South Africa, The Record Publishing Co., Cape Town. Messrs. Geo. Robertson and Co., of Sydney and Melbourne, are our special agents for Australia.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

ROMAN (Norwich).—In the week ending January 8th, there were notified in Birmingham 463 new cases of measles.

G. N. B. (Perth).—We hope to publish a paper on the subject at an early date.

A LUCKY YAWN.

RENDERED deaf, dumb, and blind at Festubert, a corporal of the 7th King's Liverpool Regiment gradually recovered his sight and hearing but remained dumb until December 31 when, after dancing at a wedding at which he was best man, he yawned, and recovered his full speech. He then sang a song, to the pleasure of the wedding party.

BETA (Walsall).—We refer to the matter in our editorial columns.

A WILLING PATIENT.

A TOPEKA man was complaining of rheumatism.

"There's no excuse for your being afflicted," said a friend. "I used to have rheumatism. When it would strike me I would go home and have my wife throw her arms around my neck and give me a massage treatment. It helped me every time. You ought to try it."

"I will," said the man "When will I find your wife at home?"—*Pacific Medical Journal* for December.

ANXIOUS (Canterbury).—Authorities have not further limited the duration of treatment, even with the most modern therapeutics.

IS IT APPRECIATION?

SOUTHWARK guardians are offering £10 notes to nurses who remain in the service for a year.

ANON. (London, W.).—We reported the meeting of the society in question, and this week publish a notice of a future discussion.

SPES.—The last appointment was made in 1907, the holder being subject to re-election annually.

BART.'S MEN IN THE WAR.

A SERVICE in memory of former St. Bartholomew men and students of the hospital who have fallen in the war during the past year, will be held on January 13th at one o'clock in the Hospital Church of St. Bartholomew the Less.

J. WATSON.—The suggestion appears to us to be sound. Our correspondent had best write to Sir Alfred Keogh, Director-General of the Army Medical Service at the War Office, with whom, no doubt, an interview could be arranged.

INDIAN WOUNDED AT BRIGHTON.

No more Indian wounded are to be accommodated at Brighton. About 5,000 have already been treated at the Brighton Hospital.

RAMPANT (Hexham).—No further correspondence on the subject has been received.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, JANUARY 12TH.

HUNTERIAN SOCIETY (1 Wimpole Street, W.).—9 p.m.: Hunterian Society Lecture:—Mr. T. H. Openshaw: Amputations, their Prevention and After-treatment.

FRIDAY, JANUARY 14TH.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital, Hammersmith Road, W.).—8 p.m.: Special Clinical Evening.

MONDAY, JANUARY 17TH.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: A Discussion on "Gunshot Wounds of the Chest" will be introduced by Col. Sir J. R. Bradford, M.D., F.R.S., A.M.S., Capt. Hubert Henry, R.A.M.C., and Capt. Morriston Davies, R.A.M.C.T. Lieut.-Col. W. H. White, M.D., R.A.M.C.T., Dr. S. West, and Dr. Murray Leslie and others will take part in the discussion.

TUESDAY, JANUARY 18TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF THERAPEUTICS AND PHARMACOLOGY (1 Wimpole Street, W.).—4.30 p.m. Sir James Mckenzie, F.R.S., will open a Discussion "The Soldier's Heart." Fellows desirous of taking part are requested to communicate with the Hon. Secretaries.

Vacancies.

Royal Infirmary, Sheffield.—Resident Surgical Officer. Salary £140 per annum, with board, residence, etc. Applications to Jno. W. Barnes, Secretary.

Bury Infirmary.—Senior House Surgeon. Salary £250 per annum, with board, residence, and washing. Applications to the Honorary Secretary, Infirmary, Bury, Lancs.

Bury Infirmary.—Junior House Surgeon. Salary £150 per annum, with board, residence, and washing. Applications to the Honorary Secretary, Infirmary, Bury, Lancs.

New Hospital for Women, Euston Road, N.W.—Pathologist. Salary £125 per annum. Applications to the Secretary.

North Riding Infirmary, Middlesbrough (General Hospital).—Lady Resident Surgeon. Salary £120 per annum, with board, apartments and laundry. Applications to Charles Postgate, Secretary-Superintendent.

Herefordshire General Hospital.—House Surgeon. Salary £250 per annum, with board, residence, and washing. Applications to Wm. A. W. Price, F.C.I.S., Secretary.

South Devon and East Cornwall Hospital, Plymouth.—House Physician. Salary £240 per annum, with board, residence, and washing. Applications to P. J. Langdon, Secretary.

Borough Hospital, Birkenhead.—Junior House Surgeon. Salary £180 per annum, with board and laundry. Applications to The Secretary.

Worcester County and City Asylum, Powick.—Junior Assistant Medical Officer. Salary £250 per annum. Applications to the Medical Superintendent.

Derbyshire Royal Infirmary, Derby.—House Physician and Casualty Officer. Salary £200 per annum, with board, residence, etc. Applications to E. Forster, Secretary.

Appointments.

FIELD, F. A, M.D.Lond., Deputy Medical Officer of Health of the Failsworth Urban District Council.

GRAVES, T. C., M.B., B.S.Lond., has been appointed Medical Superintendent of the Hereford County and City Asylum.

MACKEITH, JOHN, M.B.Glasg., Medical Officer to the Tuberculosis Department of the Central London Throat, Nose, and Ear Hospital.

TAYLOR, P. C. P., L.R.C.P., L.R.C.S.Edin., L.R.F.P.S.Glasg., District Medical Officer of the Tenterden Union.

Births.

INGRAM.—On December 29th, at Puerto, Orotava, Teneriffe, the wife of Dr. J. K. D. Ingram, of a daughter

KERR.—On January 7th, at "Ailsa," St. Helens, Lancs., the wife of James R. Kerr, Ch.M.Glasg., of a son.

PEACHELL.—On January 2nd, at Whitecroft, Carisbrooke, Isle of Wight, to Dorothy, the wife of Dr. Ernest Peachell—a son.

Marriages.

AINGER—WILLIAMS.—On January 7th, at St. James's Church, Brighton, and on December 29th, 1915, at the British Consulate, Rouen, William Bradshaw Ainger, F.R.C.S., Captain, R.A.M.C. (T.F.), late of 58 Sloane Street, and No. 2 Red Cross Hospital, Rouen, son of the late H. J. Ainger, of Christchurch, N.Z., to Elsie Mary, daughter of the late William Williams, of Courts Heart, Briton Ferry, S. Wales.

DAVIES—FOSTER.—On January 5th, at St. Michael and All Angels' Church, Northampton, Captain J. P. H. Davies, R.A.M.C. (T.), only son of the late Dr. Idris Naunton Davies and Mrs. Davies, of Ystrad Rhondda, to Marjorie Etheldred, only daughter of Leonard Burtchaell Foster and Mrs. Foster, 9 East Park Parade, Northampton.

DE BOURG—DENNY.—On January 4th, at St. Columba's Church, Pont Street, Dr. Walter de Bourg to Helen Leslie Denny, only surviving child of the late William Denny, of Dumbarton, and the late Lelia Lady Samuelson.

GIBSON—HALL.—On 6th January, at the Parish Church, Holt, Norfolk, David Gibson, M.B., Ch.B., S. Sylhet, India, to Christina Collinge, youngest daughter of Mr. and Mrs. W. J. Hall, late of Heaton Mersey, Manchester.

GRIEVE—BELL.—On January 4th, at Wallasey Parish Church, Kelburne King (West African Medical Service), fifth son of the late Dr. Robert Grieve, C.M.G., Surgeon-General of British Guiana, to Ethelwynne, youngest daughter of the late Dr. Bell and Mrs. Bell, Ivy Cottage, New Brighton.

STEVENSON—MCCRAE.—On January 5th, at St. Alban's Church, Birmingham, Captain G. H. Stevenson, R.A.M.C. (S.R.), son of G. H. Stevenson, Esq., and Mrs. Stevenson, Haddington, N.B., to Grace Dorothy, youngest daughter of the late James McCrae, Esq., and Mrs. McCrae, of Moseley.

WARNER—MALLET.—On January 6th, at St. Alban's Church, West Kensington, Charles Horne Warner, B.Sc., F.I.C., D.I.C., youngest son of the late Yardley Warner, Esq., of Philadelphia, and of Mrs. Warner, to Refna Mallet, M.R.C.S., L.R.C.P., elder daughter of Mr. and Mrs. Chas. Mallet, of Fiskerton, Notts.

WILKINSON—GROOM.—On January 8th, at Stokesay Parish Church, John Douglas, Lieutenant, R.A.M.C., only son of Mr. and Mrs. John Wilkinson, of Sutton, Surrey, to Ida, youngest daughter of Mr. and Mrs. Herbert Groom, of Stokesay, Shropshire.

Deaths.

ATKINSON.—On January 1st, as the result of an accident, Hugh Latimer Atkinson, M.B., 211 Lower Road, Rotherhithe, S.E.,

DAVIS.—On December 30th, Surgeon Lieut.-Colonel J. Norman Davis, of Clondarragh, Foxrock, co. Dublin, in his 78th year.

FAGGE.—On January 2nd, at 15 Effingham Road, Lee, Kent, Frederick Thomas Fagge, M.R.C.S., L.R.C.P., aged 76.

HEWITT.—On January 6th, at 146 King's Road, Brighton, Sir Frederick William Hewitt, M.V.O., Anæsthetist to his Majesty the King, late of 14 Queen Anne Street, W.

IMPEY.—On December 30th, Elizabeth Stephens Impey, M.B., Ch.B., by torpedoing in the Mediterranean of the s.s. Persia.

SCOTT—ROBERTSON.—On January 2nd, at 14 Cheyne Walk, Chelsea, Sir George Scott Robertson, K.C.S.I., M.P., aged 63.

WILLIAMS.—On January 7th, at Bournemouth, Samuel White Duckworth Williams, M.D., elder son of the late William White Williams, M.D., F.R.C.P., of Hayes Lodge, Cheltenham.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, JANUARY 19, 1916. No. 3.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

Medical Matters and the Lay Press.

THERE have recently been a good many very pertinent and timely letters addressed to the more influential of the dailies on subjects connected with the medical side of the war. A curious and disappointing fact about these letters is that they are all of them pseudonymous, a feature which deprives them of more than half their weight. I suppose it is not in consonance with military discipline for an officer, under his own name, to criticise the War Office in the public Press, and as an enormous number of medical men have been cajoled or whipped into the military fold, the profession, the members of it at any rate who can speak from first-hand knowledge, have thus automatically been rendered inarticulate. This is a serious, but by no means the most serious, disadvantage of the militarising of the profession which has been steadily going forward since war began.

Militarisation.

IT has always been a puzzle to some of us to discover any adequate reason for this militarisation. That a man is willing to place a portion of his time and brains at the disposal of his country, in the service of the sick and wounded, is no sufficient reason for putting him into uniform and labelling him with a military title. I do not refer to those who are entirely given over to military work either at home or abroad, but to those who, merely because they are on the staffs of the large general hospitals in London, are made to masquerade as military. This useless procedure was bound to give rise to many anomalies, and there have been bitter complaints of the many undignified absurdities which have thus been caused. A civilian medical man is a medical man first, and the fact that he is looking after soldiers cannot make him into a military medical man. Let the shoemaker stick to his last and the civilian doctor to civilian garb. The be-uniforming, the shaving of grey beards and the other concomitants of militarisation are really very undignified.

Incongruity.

I RECENTLY saw a list of names of those who were to speak on some scientific question at the Medical Society of London. Nearly all of them were well-known and honoured names in the medical world, and most of them wore the disguise of military rank. That kind of thing is simply childish. I was once present at a function at which the degree of LLD. was conferred upon John Bright. One of the University functionaries, in speaking of the great tribune immediately after the ceremony, referred to him as "Dr." Bright. The same shock of incongruity as then overcame me finds itself repeated when I see it recorded that Surgeon-General Rolleston, or Major Sir John Bland Sutton are to record their views on the proper treatment of wounds or on the nature of trench foot. The distinction which properly attaches to the names of these and other gentlemen is purely scientific, and they should decline to allow it to be hidden beneath unsuitable trappings borrowed from a temporary sphere. Very few LLD.'s or D.C.L.'s call themselves "Dr." It is done, but not in the best circles. Imagine Dr. Tennyson, Dr. Arthur Balfour, or Dr. Asquith. D.D.'s, on the other hand, are not infrequently referred to as "Dr." Occasionally a Mus. Doc. likes to be thus addressed.

The Khaki Woman.

BUT if the uniformed, beard-bereft elderly physician is an unedifying spectacle, what is to be said of the khaki-clad woman? In extenuation of the plight of the former it is to be urged that he is only obeying orders; if anything can be advanced in excuse for the frightfulness of the latter I have not yet heard it. That civilian men should be forced, not always unwillingly be it admitted, to play at soldiers is a pity; that women should thus voluntarily mask themselves is an insult to good sense and good taste. We are constantly being reminded of the marvellous work which women are doing in the war. It is not necessary to belittle the work in order to realise that it is being uncommonly well advertised. We shall not be allowed to forget that women have undertaken a great deal of work which used to be done by men, but that does not necessarily mean that the work is being as well done as it was before, it merely means that, after a fashion, it is being done. The public and employers are properly indulgent to women in these new spheres. Because of her sex, inefficiency in these new activities is tolerated in a woman, and mediocrity is aggrandised

into genius. If the khaki-clad woman has any *raison d'être* it is merely as a part of an uncommonly well-organised advertising scheme, the full fruits of which will not be brought home to us until peace is declared. If these stupid women must ape the military, they might at any rate seek to cultivate some degree of military smartness in appearance. The *tenue* of some of them is deplorable in its combination of sloppiness and unsuitability.

Furlough.

A CORRESPONDENT of the *Times*, signing himself "X," makes the excellent suggestion that "the time is come when the remnant of the famous Expeditionary Force that went to France in August, 1914, should be withdrawn from the front for a period of three or four months." These officers and men, more especially, perhaps, the officers, are entitled to a period of relative comfort and lessened responsibility, and it would add to their efficiency if they obtained it. "X" goes on to say, "I saw them after the great retreat and the advance on the Aisne, and was delighted to observe their fine condition of mind and body. I have seen some of the same men lately home on short leave, and although they were all resolute and confident, they seemed to be many years older, war-worn and jaded." That is exactly what one would expect, especially from the monotonous conditions imposed by trench warfare. There are hundreds of very efficient officers and men who are bursting with impatience to go out; why are not the former replaced by the latter?

The Medical Future.

THE Editor of the *British Journal of Dental Science* writes a letter to the *Times* in which he says: "Those who assert that sickness among civilians can be dealt with, even if the new Armies withdraw from civil practice the majority of the younger doctors, claim that the older men and even retired practitioners can undertake their duties. As a member of the teaching staff of a London hospital for many years, I know that the medicine and surgery taught to-day are absolutely new systems when compared with those current a generation ago. If all the young educated doctors leave us not only will the civil population have too few doctors, but it will be deprived of most of those educated in modern scientific methods. The preservation of infant life is to-day of paramount importance; to ensure it we need clean midwifery and assured knowledge of pediatrics."

Up-to-dateness.

THIS is sound sense. No one knows better than the medical man who has been out of harness for a year or two how quickly the tide of moving ideas and improving methods sweeps over him. Even the country practitioner, who has to be physician, surgeon, midwife, oculist, and the rest, when, after a few years he revisits his hospital, is forcibly struck with the changes, not only in *technique*, but in underlying principles which have taken place since he was a student. The public thinks that once a man is a doctor he is always a doctor. This is, of course, in one way true; a rusty doctor in any medical post is infinitely better than the keenest layman, but it is also true that there is no profession in which rust gathers more surely than in ours, and what is wanted for the near future is not rust, but the latest knowledge and the greatest keenness, and these are what are now being withdrawn wholesale from the effective ranks of the profession.

The Dental Future.

THE writer then proceeds to state the case from the point of view which specially appeals to him and on which he is eminently qualified to be heard: "The recruiting authorities are dealing even more hardly with dentists, dental students, and dental mechanics than with medical men. All three classes, unless possessing a medical as well as a dental qualification, are told they must enter the ranks as combatants. If they are medically qualified they must join the R.A.M.C. The result is that a most serious deficiency of dentists imbued with modern methods is rapidly developing, while there are no students left at the dental schools preparing to follow on." This is, of course, as much a medical and hygienic matter as it is a dental. The time is long past when dentistry was regarded as a mere side track on the road of medical science. The dental surgeon of to-day is scarcely less important than the abdominal surgeon, but he must be of to-day and not of the day before yesterday. The mouth is now recognised as one of the most frequent and potent provokers of disease, and to be efficient its care must not only be skilful, artistic and learned, but it must, above all things, be unremitting in its vigilance. To make combatants of the men who are qualified, and were qualifying for such work is typical of the unimaginative wastefulness in human material which is now rampant. Mr. Lloyd George has been reproving himself and his colleagues for their too-lateness. I hope some imagination and foresight will be brought to bear upon the medical situation before it becomes too late to remedy it.

"Advice" from the L.G.B.

IN the *Leicester Mail* it is reported that at a meeting of the Hinckley Guardians, "Dr. Murray, who is succeeding to the late Dr. Barrett's practice, applied for the position of medical officer held by the latter. As he is of military age, it was decided, on the advice of the Local Government Board, not to appoint him." I sincerely hope that some one in the House of Commons will ask a question of the President of the L.G.B. on this subject. On the available information, it would be difficult to imagine a more tyrannical exercise of influence or a more unwarrantable piece of interference than this "advice" of the Local Government Board. It probably means that Dr. Murray bought the death vacancy, and that he calculated upon obtaining the appointment. That his chances of so doing should be spoilt from "on high," owing to the fact of his being of military age, is a scandalous injustice. The high-handed manners of Government departments want careful watching. That we are fighting the Prussians abroad is being made an excuse for imitating them at home. The Local Government Board had neither the right nor

the power to interfere in this matter, but it evidently bounced the Hinckley Guardians into thinking it had. Dr. Murray ought not to let the matter rest there. He has unfortunately now no remedy except the unsatisfactory one of bringing the whole matter into the full light of day by a well-worded question in the House.

Preston Councillor's Facetiousness.

AT a recent meeting of the Preston Town Council, the new order making compulsory the notification of measles was under discussion, and, on the question of the fee payable to the doctor for the notification, Councillor Cartmell is reported to have said: "Somehow in these times all the ripe plums fall into the doctor's basket." The reporter in the *Preston Herald* calls this "facetious." It is nothing of the sort: it is merely coarse. "Facetious," according to the authorities, refers to elegant wit. This sort of remark is singularly devoid both of wit and of elegance: it is a form of stupid vulgarity which is all too frequent among provincial jacks in office in their reference to medical men. To call the fee of one shilling a "ripe plum" is doubtless considered in some classes as very funny, and when that fee is regarded as more than adequate payment for the ability to distinguish between the rash of measles and the prodromal rash of smallpox, the plum becomes so succulent as to provoke the envy even of the opulent.

Titled.

W. G. WRITES: "As a now 'constant reader'—with pleasure and profit—of your 'At the Periphery,' may I venture to comment on your present issue? I find there an exact reproduction of my own ideas a little while ago—unwritten ideas on my part—as to the inadequacy of medical honours in this country and the exclusion from the "Upper House" of some of the men who shed most lustre on the national name. But of late I have thought differently. Now I ask myself, 'Is that assembly worthy of them?' and I am sure of the contrary. After all, avoiding extreme views, is not an hereditary honour an anachronism and a very mischievous one? Is not our remedy the remedy of the time—abolish all such. Look at the hereditary nobles of Germany and Austria! Has the world anything more exclusive or anything more vile?"

Another View.

THIS is trenching upon a domain—the political—which it is my purpose as far as possible to avoid, but I may at least venture to point out that there is another side to the view here expressed. Hereditary titles are, of course, an anachronism, but like a good many other antiquities they lend a certain colour and dignity to life which many of us would be very sorry to be without. I do not go so far as the scion who, in a burst of poetic frenzy in his Oxford days, wrote the couplet which brought him even greater fame than the dukedom to which he ultimately succeeded. It ran something like this:—

"Let art and commerce, wit and learning die,
But give us still our old nobility."

I am nevertheless of opinion that hereditary rank, especially when it is worthily borne—which in this country it usually is—stands for something which lends atmosphere and picturesqueness to a social system which is otherwise for the most part drab and dull and uninspiring. And, if this class is to be maintained and its inevitable gaps filled, some at any rate of the recruits should come from those who have been real benefactors of the human race.

Twells Brex on Dentists.

THE writer in the *Daily Mail* who signs himself "Twells Brex" must add enormously to the popularity of that paper, for he is gifted with a drollery of outlook, a quaintness of expression and a lightness of touch which raise his articles into the highest class of humorous writing. Recently (January 3rd) he had an article entitled "The Woman Dentist—Another Sex Illusion Shattered," which was calculated to provoke mirth in the most pessimistic. "Even when Pullhard silenced me with the rubber gag, I could express myself by spasmodic knee-jerks. Once even I kicked all his strafers off their pivoted tray and gained four minutes' armistice while he collected the fallen." But Pullhard was at the front and his *locum* was a lady, and the writer submitted himself to what he fondly hoped would be gentle mercies. "But I went away with an aching disillusion. If women are, indeed, the tender sex, how can they become dentists?

On Cab Whistles.

BUT "Twells Brex" can be serious and very incisive when he pleases. Here is a passage from an article (January 7th), "Murder by Cab Whistle":—"The cab whistle is an older nuisance. It has always been a puzzle to Londoners why the cab whistle is tolerated, even by its friend the noise-loving law. The cab whistle is, perhaps, the most callous and selfish ebullition of the individual that modern civilised urban life permits. The scream of the cab whistle is the most piercing and distressing noise that man has invented. Its very intention—a signal, travelling far and insistently—makes it flick the awake, rouse the asleep, and rack the ill of a whole street. And this for one man or woman who is too lazy to walk to a cab rank, or is vulgarly desirous of proving to a hundred neighbours, 'Listen, how many dinner guests I am speeding again to-night!' In these two classes come the majority of the users of private cab whistles. For the cab whistle is an implement of refined torture that no decent inhabitant of a residential street would use except under the stress of a foul night or an urgent call. Its only legitimate use is by porters of offices, theatres, and restaurants in streets without private inhabitants. The good sense and neighbourliness of Londoners have hitherto kept its use to some extent limited. The shortage of taxi-cabs and some strange and sudden decadence in the humanities have made an intolerable misuse of it that is making residential London a purgatory."

Neurasthenia.

THE article which we publish this week from the pen of Dr. Tom A. Williams, of Harvard University, deals with the much-debated question of "neurasthenia" from the modern common-sensical point of view. To plaster a symptom-complex with a name of Greek derivation does not make a disease. The labels which are thus manufactured to satisfy the demands of the laity are all too often instrumental in throwing dust in the eyes of the profession. It is this dust which Dr. T. A. Williams seeks in this article to remove, and I feel sure our readers will be grateful to him for his effort. Writing to our esteemed contemporary the *Lancet* a letter under much the same title as Dr. T. A. Williams' paper, Dr. C. A. Mercier has some very pithy and pertinent things to say which he has apparently said at greater length in an article which the *Lancet* will shortly publish. Anything from Dr. Mercier's pen is always worth reading, and I await the publication of his article with joyous expectation.

SINAPIS.

CURRENT TOPICS.

Remuneration for Disablement Benefit Insured.

A correspondent wrote, under date January 9th, as follows:—"I presume it is too late for you to communicate with the author of the interesting articles on insurance. In the first he states we are not paid for those in receipt of disablement benefit, but Dr. Richmond writes me to say that there is no truth in the statement that practitioners on the panel receive no remuneration in respect of treatment provided for insured persons in receipt of disablement benefit. Which of the two is correct?"

This letter we sent to "Delta," who replied as follows: "Please forgive my delay, but your letter and enclosure arrived with a broken fibula, the former being the more welcome. In answer to your correspondent, the case may be thus stated: Disablement benefit persons pay no contributions, hence nothing goes into the Medical Benefit Fund for them. There are in round numbers 15,000,000 insured. If I have on my list 1,500 of these—really I haven't half this number—I get 1/10,000 of that fund. The Commissioners say that owing to the method of book-keeping I am paid for some number over this 1,500—say, for argument—1,600—and that this arrangement compensates me for the absence of contributions from the class under notice. But this will, of course, apply to every Panel doctor. Therefore the Insurance Committees are paying doctors for 16,000,000 persons instead of the 15,000,000 for which they hold funds in the 'Medical Benefit.' Which is very, very absurd. For no stretch of the imagination can picture the Commissioners paying for more than 15,000,000 insured, if the Medical Benefit Fund only has contributions for that number. I hope this is clear; a broken leg does not clarify one's powers of expression, except in respect to the lesion."

Magistrates on Milk.

On the public health authorities throughout the kingdom is thrown the responsibility of supervising the milk supply of the people; on the magistrates is thrown the duty of visiting breaches of the law with suitable penalties. Without the activity of these two sets of public functionaries the public has no protection against the fraud of the dishonest purveyor of milk. There is, perhaps, no meaner commercial fraud, and none more dangerous to the health of the most delicate members of the community than the adulteration of milk. It is the infant and the sick person who suffer most, and impure or adulterated milk is one of the potent causes of infant sickness and mortality. We have before now noticed how little support is given by the Dublin magistrates to the praiseworthy efforts of the health authorities to deal with the evil of the adulteration of milk. From the report of the Medical Officer of Health for 1914 it appears that in case after case the penalty inflicted was a more or less trivial fine. Even when the same defendant was convicted twice or three times in the same year, a fine was deemed adequate penalty. Surely the magistrates of Dublin must know that water is cheap, and the sale of watered milk highly profitable, and that a few days' fraudulent trading will go far to pay even a heavy fine. In a case heard a week or two ago, analysis showed the presence of 11.8 per cent. of added water; there were four previous convictions; the defendant was fined £3. Until magistrates are willing to impose the real penalty of imprisonment it is hopeless for health authorities to attempt to cope with the milk fraud. As things are at present, cheating pays.

The Medical Superintendent.

It might be to the advantage of many hospitals were they to adopt a system already existing in some of having a fully-qualified medical practitioner in the capacity of plenipotentiary, so far as general administration was concerned. Such a functionary, in dealing with the clerical work, would be in a position thoroughly to comprehend the direct bearing of his arrangements upon the medical side of the institution. Moreover, in connection with the supervision and control of the resident staff and pupils, his sympathies would be more acute, and his judgments less resented, than we fear is occasionally the case when the secretary or matron take upon themselves the necessity of interference—no matter how just that interference may be. He would fully understand what was essential in the dieting and treating of cases, and could discourage the foolish economy which is too often practised by hospital administrators, in the absence of complete grasp of the features of certain cases. Attention is drawn to this matter by certain instances which have come under our notice, where no matter how good the intention of the matron and secretary, for lack of a broad outlook, such as is gained by a practitioner of some years' standing, the domestic administration and the management of patients by resident staff do not proceed upon parallel lines. Inasmuch as the members of the resident staff are junior and temporary, they either do not interfere at all, or do so unwisely. It would be clearly understood, of course, that such an official would have nothing to do with treatment, which would remain as at present, in the hands of the visiting staff.

The War House Surgeon.

The manner in which the unqualified resident pupil has risen to the occasion created by the war, is, in many instances, worthy of close attention and high praise. Such men, in several hospitals have been called upon to discharge the offices of house surgeon and house physician, and in those cases which have come under our notice, appear to do so in an admirable fashion, all things considered. One is struck by the thinness of the line which separates the final year's student from the first year's practitioner, and hesitates as to whether it might not be well to perpetuate the scheme by laying more responsibility upon the clinical clerk and surgical dresser than heretofore. In district maternity practice such a scheme exists and is amply justified by results; still more, it might be urged, would it succeed in a hospital where a qualified man, in the shape of the resident medical officer, is to hand. Such an arrangement would necessitate the cutting down of the number of resident clinical clerks, but this might prove eventually an advantage. There would be more efficient discipline, and less shirking of work, inasmuch as no deputies could be found The system of deputy duty, in a hospital having many clinical clerks, is a continual source of annoyance to house surgeons and hospital porters alike. Under such an arrangement as we suggest, the house surgeon would be set free from much minor work, notably in the extern, and could devote his time to learning more advanced routine of practice. The greater responsibility placed on students in the Irish than in the English hospitals has had a high educational value, and we could wish to see the system extended.

Export of Cocoa.

After the Lords had passed the Munitions Bill through Committee on Thursday last, their attention was called by Lord Sydenham to the cocoa

exports from this country to the countries of neutrals during the war. An export of 6,638 tons between August, 1913, and July, 1914, had increased to 30,086 tons between August, 1914, and July, 1915. Our total exports of cocoa in the first 16 months of the war had been 33,357 tons, as against 8,883 tons in the corresponding 16 months before the war—an average of 2,000 tons a month during the war and of 500 tons a month before it. Holland, Denmark, Norway, and Sweden had taken between them only 1,161 tons of cocoa in 1913, as against 7,581 tons in 1914 and 15,316 tons in 1915 up to December 21st. The Board of Trade returns showed that our exports to Holland had been 984 tons in 1913, and that they had run up to 5,048 tons in 1914. In the 11 months before the war Denmark had imported 2,211 tons and Sweden 1,550 tons; in the corresponding 11 months of the war Denmark had imported 18,071 tons and Sweden 11,120 tons. He could not see why cocoa, an important food and source of military supply, should not have been made contraband.

This is a very important matter as cocoa is a foodstuff of great value, not only on account of its nutritious power, but on account of its portability. Some of our British houses have consistently advocated, both in interviews with Government Departments and in the Press, the total prohibition of the export of cocoa to Holland, Denmark, and Scandinavia during the war. Messrs. Cadbury Bros., of Birmingham, have made themselves very prominent in this campaign. They are able to point to the fact that their own exports of chocolate during 1915 were of the value of £768 only.

The Suppression of Quackery by the Edinburgh College of Physicians.

In pursuance of their campaign against unregistered practice of medicine, the Royal College of Physicians seeks to interdict the "Dr. Temple Company" from using the title "Dr.," or from pretending that they are doctors, or are persons qualified to practise medicine in connection with the business carried on by them in Edinburgh and Glasgow. After hearing counsel, Lord Dewar, on December 22nd, granted interim interdict, and on January 14th Lord Anderson passed the note for trial of the case in the Court of Session, and continued the interim interdict, but modified it by limiting it to Edinburgh, and excluding Glasgow from its operation. His Lordship said that the respondents' argument was that the curt process of interdict was incompetent, because when Parliament made the use of the title "doctor" by unqualified persons illegal, it at the same time prescribed a remedy, namely, to prosecute for penalties in a criminal process, and that remedy excluded a civil action. The complainers averred that the College was entitled to protect the medical profession generally, and also the right of the public. This was a wide proposition, and his Lordship thought that if it was the complainers' only reply he would have had great difficulty in allowing the process to remain further in court. He, however, proceeded on the point that the complainers had relevantly averred that they were being injured by the illegal actings of the respondents. There was an important question of title to try, and it should be tried by the Court of Session. As the College was only entitled to speak for themselves, and with regard to Edinburgh, he modified the interdict by excluding reference to Glasgow.

It may be remembered that the College has already successfully prosecuted the firm in question under the Medical Act, and that the statutory fines were imposed.

Vital Statistics of Ireland.

It is with regret we notice a further diminution in the amount of information contained in the "Weekly Return" issued by the Registrar-General for Ireland. It is possible that the change is only temporary and due to war conditions, such as the necessity for economy or depletion of the staff. We hope that it is so, but we cannot but remember similar changes made prior to the war, the sum of which has robbed the "Weekly Return" of much of its interest and value. One of the most valuable tables in the return for many years past was the table of figures relating to some twenty or thirty large cities of the world—not only in Great Britain but in Europe, India, Egypt, and America. This table is now gone, and there is no reference anywhere in the return to vital statistics outside Ireland, beyond what is contained in the following two sentences:—"The mortality last week in 96 large English towns (including London, in which the rate was 13.3), was equal to an average annual death-rate of 14.3 per 1,000 persons living. The averate rate for 16 principal towns of Scotland was 15.9 per 1,000, the rate for Glasgow being 15.0, and for Edinburgh 15.4." For comparative purposes the return is now quite useless. As the figures no doubt still reach the General Register Office, it seems a false economy to refuse to print them. In other ways the return has become even less informative than heretofore, instead of developing, as it should, from time to time.

PERSONAL.

The Academy of Medicine in Paris has elected Sir Dyce Duckworth, Bt., M.D., of London, to be a foreign corresponding member.

After 32 years' practice at Fochriw, Wales, Dr. E. Davies, J.P., is now retiring owing to ill-health. He was presented with a gold watch by his patients.

We regret to learn that Dr. W. J. Potts, Medical Superintendent of the Bethnal Green Infirmary, has been injured in a motor-car accident.

Dr. Ernest Peachell, Medical Superintendent of the Isle of Wight County Asylum, has been appointed Medical Superintendent of the Dorset County Asylum at Dorchester.

Lieutenant-Colonel Edward Lyman Munson, the well-known authority on problems of military hygiene, has assumed the editorship of the American journal the *Military Surgeon*.

A memorial to the late Dr. Alexander Graham, who died of wounds received at the Dardanelles, which took the form of an enlarged photograph of the deceased, was unveiled at Stratford last week.

Lieutenant-Colonel Dr. Robertson Wilson, J.P., made his first public appearance since he was wounded at the Dardanelles at the Wallasey Police Court on January 13th, where he entered upon his magisterial duties.

Mr. William Taylor, Vice-President of the Royal College of Surgeons of Ireland and Surgeon to the Meath Hospital, Dublin, has been invited to become Consulting Surgeon to the Coombe Hospital in succession to the late Mr. F. S. Heustan.

Sir William Turner, K.C.B., Principal and Vice-Chancellor of the University of Edinburgh, completed his 84th year on January 7th. Migrating to the Scottish capital over 60 years ago, he has long been recognised as a tower of strength to the Edinburgh Medical School, and later to medical education generally as a member and finally as chairman of the General Medical Council.

CLINICAL LECTURE
ON
THE MANAGEMENT OF FUNCTIONAL NERVOUS AFFECTIONS:
MODERN METHODS ILLUSTRATED.*

By TOM A. WILLIAMS., M.B., C.M.Edin.

Lecturer on Nervous and Mental Diseases, Harvard University, Washington; President, Washington Society of Nervous and Mental Diseases; Foreign Correspondent, Member of the Society of Neurology, Paris, etc.; Neurologist, Freedmen's Hospital and Epiph. Dispensary, Washington.

THE general idea is that a functional nervous disorder is one in which the physician has been unable to make a diagnosis; and, therefore, by exclusion of structural changes, he calls it functional. Some physicians say that there must be some organic substratum for any disorder whatever, and that we only call it functional from lack of knowledge. I wish to protest against that attitude. So we must begin with what we do mean by functional diseases. Disorders of the nervous system may be divided into two classes:—

First, there are organic, by which we mean disorder of function showing itself in consequence of some actual physical changes in the nervous system itself, even although those changes are only histologically discernible. We are not going to speak now of any such diseases.

Secondly, there are nervous diseases which do not include any actual disturbance of the structure of the nervous system, but are due to a disordered reaction of the nervous system on account of the fact that it is not receiving the proper nutrition necessary for proper activity, or because the excretory conditions are not such as to permit it to metabolise properly. Those, of course, are physical in origin. But there is another kind of disturbance of nervous reaction in which there is no physical disorder whatever, but in which the orderly reactivities of the arrangements of the nervous system into functional systems are not accomplished because of some manner or trend of direction in which they are orientated. These we call psychogenic disorders. An example will best explain the type of psychogenic disorder which we see in the experimental animals with which Pavlow worked on the digestive glands. He tells us how he made the gastric fistula in dogs in order that he might study the flow of gastric juice, and that he subjected the dogs to various influences to modify that flow. The nature of all these influences is psychological. You remember, for example, that a dog normally secretes gastric juice when he is shown a piece of meat, and that one can substitute for the stimulus of showing a piece of meat such a stimulus as the ringing of a bell which the dog has learned to associate with receiving his food, so that when the bell rings, the dog's gastric fistula secretes gastric juice just as when shown a piece of meat. That is a "conditioning" of a reflex; but you can readily see that it is not the ringing of the bell in itself that causes the secretion, but the *idea* that the dog has of the *meaning* of the bell—a psychological process—which causes it to have an emotion of pleasurable anticipation, which leads to the flow of the gastric juice. In the same way he performed the opposite process with a whip by a reverse mechanism, inhibiting the flow of the gastric juice in spite of the fact that the dogs were shown a piece of meat—so powerful was the stimulus of fear from the whip, not by the mere visual elements of a long body with a flexible appendage, a whip, but on account of the fact that that body to the dog had a meaning—a meaning of apprehension of impending physical pain and fear thereof, and it was the meaning (which is a psychological factor) which prevented that dog from secreting gastric juice.

Those are simple experimental illustrations of psychological processes influencing bodily reactions. We know of Cannon's experiments of proving the effect of fear in causing hyperadrenia in cats, and Crile's clinical work proving that fright can kill.

Now I say these things because they are experimental; because they correspond to some of the clinical facts; in order that there may be no further scepticism as to the real efficacy of psychological reaction.

Now we go back to a study of those functional nervous conditions which have a physical source other than diseases of the nervous system. The prototype of these conditions is comprised in the old "waste-bag" that we used to call neurasthenia. Neurasthenia is a word used in the sense of psychological disturbance by some writers—Dejerine, Raymond—but we are not going to use it in that sense at all. Neurasthenia is a syndrome, often of complex causation, of which exhaustion is the chief feature, accompanied or not by pains and other symptoms. It should not be regarded as a clinical entity. If we take a number of patients who are really capable of being classed in the old neurasthenia, we shall find various types speaking ætiologically. Let us enumerate a few. Most of the cases of so-called neurasthenia can be differentiated into one of the following types: In the first place the middle-aged neurasthenic is nearly always found to have some actual demonstrable physical disorder, and since the use of the sphygmomanometer we find a large number of cases with high blood pressure, and many with renal disorders, even short of the exhibition of hypertension in the blood vessels. Many of us believe that hypertension itself is merely one of the signs of toxicosis, and our reasons for that belief are that in such patients, when they reach a more advanced stage, there are manifestations, clinically and pathologically, definitely due to failure of proper metabolism of proteins. We know in therapy that many of such patients are immediately relieved when there is a limitation of the intake of food protein, and we are beginning to know, since going more into the study, that it may not be a matter of quantity of protein, but a matter of the kind of protein, which to certain persons is toxic in that respect; just as we know there are other than food-proteins which are toxic to various parts of the body. This subject is new and is yet to be worked out in detail, but it is not new that we can by appropriate therapy keep many of these patients comfortable for a great number of years by appropriate dietary.

As an example:—An engineer, 35 years of age, had obsessions. He felt he could not concentrate on his work, believed he was losing his mind, believed it necessary to take a European trip for two years. He had been away for several weeks in the mountains without any benefit, came back to work

* From an address given to the Chicago Medical Society at the opening of their new hall in the Marshall Field Building, October 7th, 1914.

—fell asleep over it, felt discouraged, did not know what the upshot might be. Investigation showed that since leaving active field work he had been employed in a large company, which necessitated staying in town, doing only office work for three months; all this time he had been taking the food he had been accustomed to. Without going into further detail, he had the usual clinical syndrome of disordered metabolism in a robust man. To have diagnosed neurasthenia would have led to most irrational therapy, and yet current custom might have been content with such diagnosis.

The man was given a rational diet with a limitation of protein and over the average amount of the vegetable saline, so that in a week he cleared up perfectly. He did not have to go to Europe, and has been quite well for three years.

Contrast that case with a similar one. A robust man who in the same condition refused to consult a doctor, although strongly urged to do so by myself at the request of his friends, instead adopted Christian Science; believed himself perfectly well, went on with his work, and finished up with suicide, the result of business reverses caused by optimistic rashness at the end of six months for lack of rational medical treatment of a toxic condition. In contrast, I multiply successful cases; but I think every physician of experience has seen examples due to a toxic condition removable by dietary. (1)

Another kind of neurasthenia is the type first spoken of by Dr. Haskell, of Bridgport. He found that a large number of dispensary ambulant "neurasthenics" were in reality, tubercular, and not altogether latent. A still more striking presentation of the same fact was that made by Dr. Head, of Minneapolis (A.M.A.), who found that even well-to-do neurasthenics were, in a large proportion, tubercular. Dr. Head believes that tuberculosis accounts for many of the cases which Dr. Weir Mitchell benefited by his well-known methods. (2)

Other cases classified formerly as neurasthenics are those having disorders of the internal secretions. We now know a great deal about the clinical manifestations of "nervousness" caused by disorders of the thyroid secretion. Nowhere do we see so aggravated a syndrome of erythism with psychological excitement as in hyperthyroid patients. We know, too, the depression of hypothyroidism, which more particularly in elder people, is often overlooked by careful observers and called neurasthenia. In disthyroidism there are peculiar recurrent states of neurasthenia, great prostration, inability to concentrate, as have been well described by Dejerine, whose book is well worth reading; pituitary disorders too create neurastheniform symptoms. Lastly, there are the cases which I described at the A.M.A. meeting last June, where the insufficient secretion of the adrenal gland produced what I think is the clearest and simplest type of neurasthenia. These patients complain of no severe headache but merely of extreme asthenia, an inability to think clearly, discouragement in consequence, accompanied as a rule by a low blood pressure.

Now the therapy of all these different types, obviously should not be the rough empiricism of the so-called rest cure, which would to many do a great deal of harm; for instance, in a case of toxic-hypertension from poor metabolism, or in any hypo-endocrinism, obviously therapy should be directed to the cause of the condition. I am not going, of course, into the details of that kind of treatment, because it is a medical problem we are all to some degree acquainted with, although in some instances the problem has still to be worked out.

Now, lastly, before proceeding to the psychological cases, it is necessary to speak of another physical condition which we cannot class under any of these heads, which does not create a picture of exhaustion, but which gives rise to a state of general discomfort, restlessness and excitement. That also I believe to be a toxic condition. It is frequently caused by caffeine. It is the type of what the laity calls nervousness or nervous temperament or disposition. It often shows itself in children by a wriggling, a twitching or tic. Psychologically there is the feeling that the time is out of joint; nothing goes right. Later on, if the condition remains chronic, the person never feels right, he feels that things are all wrong, he does not recognise that it is his ideas of reference—that is to say, there is a pessimistic tone and when he finds any circumstances which seem to reflect upon him, or to be unfavourable, he seizes upon that just as a magnet seizes upon a piece of iron. These ideas of reference may become the foundation of paranoia; and we believe that some paranoia may be physical in the first place. Now when a physical condition which may give rise to restlessness, which leaves a jerking for instance, even when this physical state subsides, either spontaneously or from better hygiene, or from medical assistance, the habit which has occurred may persist and the patient who has learned to jerk his shoulder because he has a tight coat may go on jerking his shoulder from habit for the rest of his life. These latter patients then will require for their therapy psychological measures. We shall find later that some of the cases which originated psychologically require for their management physical measures also.

This brings us to a consideration of the clinical types which we most commonly meet which originate psychogenetically. Let us study the mechanism of some of the cases of that kind. A man was referred to me by Dr. Williams, of Boston, because unable to write his name clearly on account of a tremor. This had existed only for one month, and as his occupation was that of a naval paymaster, it necessitated the writing of several hundred cheques a day, and so he feared he might be unable to keep his position. Now the tremor of the hand was not due to an organic condition of the nervous system nor to a toxic condition of the patient. We know tremor is a symptom of toxæmia or of nervous disease. But in this particular case, by finding out that the man is able to draw without trembling, which he could not do if his neurons were diseased or intoxicated, we concluded that his tremor was psychogenetic. We then analyse why writing in particular causes this man to tremble, and we find out that the first time he trembled was when he went back to work after being operated upon and not fit to go back. He was tremulous when he went back to work, and the cheques he signed were refused by the bank, who could not recognise the signature. Apprehension of this caused him to tremble thereafter when attempting to write. This case was published in the *New York Medical Journal* (March, 1911), and the method and management of the case described. The patient was only seen once, and this led to his cure by re-education.

Another case, also of occupational writer's cramp, began in a woman of about 40, referred to by Dr. Little, on the occasion of sickness of her children from scarlet fever. At Christmas time she had to write many letters, and she found herself unable to do so. Formerly she had been proud of her speed in writing, but at the time she was occupied by the anxiety of her children her writing became almost illegible. After she was taken in hand, the mechanism was worked out and the methods of cure established. (3) This patient had been

treated by massage, which I shall call a spurious treatment of functional nervous affection. Many treat by electricity, some are treated by rest of the part—absolutely useless; some by distraction, going away for a change. You can see that none of these measures meets the real issues of not being able to write, and until that is analysed and the patient shown the methods, all other therapy is meaningless and, indeed, it directs the patient to the member which she supposes is diseased from a real source of psychological reaction.

Another most instructive type of functional disorder, often, too, an occupational one, is the traumatic neurosis. (4) Let us again study the situation by a case. A brakesman on the railway, seen with Dr. S. S. Gale, Roanoke, Va., was thrown from a car, his back injured severely, strained and bruised. He was laid up for the better part of a week in consequence. During that time he saw several physicians. The railway physician, of course, told him there was nothing serious the matter, he would be all right; which opinion was discounted because it was, he thought, to the interest of the railway surgeon not to find anything the matter with him. His private physicians told him there might be spinal disease; and that was the central feature in his mind. Six months later I saw this man: found him hobbling on crutches, in pain, with anæsthesia up to the hips, lost 20 lb. in weight, having a sallow, unhealthy complexion, a dull eye, frequent attacks of weeping and extreme dejection, a hopeless outlook—simply because he believed he was damaged for life. Examination showed there was no lesion of the spinal cord or of the peripheral nerves. His sensibility was not impaired because of any lesion, but was only impaired because he did not *believe* he could feel. At the one sitting we had the sensation was restored down to the knee. His motor impairment was merely due to his own belief that he could not walk; his emaciation and sallow tint were simply due to the depression of mind in which he lived for six months which hindered sleep, appetite and assimilation. All these would disappear when he ceased to be anxious about his general condition. Now, this man had been treated by reassurance, suggestion, by various drugs, and, possibly, by various physiological applications without any effect whatever. The man was perfectly restored to health in a month as a result of one interview, which lasted three hours, during which the condition was explained to him so that he could understand the mechanism of his disorder. (5)

Another case, without any physical manifestations of disease, such as writer's cramp or paralysis, was that of a farm lad, seen with Dr. A. B. Hooe, æt. 24, who had endeavoured to commit suicide four times, twice in a sanatorium where he was sent to be treated, but there all the attention he received was incarceration and surveillance. Becoming worse, he twice tried suicide there, and was then brought to Washington. There the proper therapy was begun by trying to find the cause of the boy's impulsion to commit suicide. The cause was shown by the analysis of his psychological content. The reason he tried to commit suicide was because he was ashamed of himself, this because he could not make good in life; he believed he was a half-idiot. In school first, and latterly in his youth, and again in managing his mother's farm, which he could not successfuly do, and he felt humiliated all the time.

The beginning of the feeling that he was not as other boys arose from the fact that he had been told by other boys that self-abuse led to softening of the brain, and as he had been indulging in self-abuse he became shame-faced, and he lived in this vicious circle until he was 24 years old.

Treatment was conducted in a general hospital, and after this was discovered, and it was all explained to him clearly, in a very simple way, he was given freedom, and in a week left for home, having rid himself of his desire for self-destruction as a result of rational therapeutics.

Another very common functional disorder is nervous dyspepsia. A woman was brought to me by Dr. Jackson because she was becoming more and more anxious, nervous and disturbed, more and more difficult to feed, although she consulted a very well-known gastrologist and was under his care for six months. It was found that this woman was hysterical. I shall not go into the case at length. She had been taken to the gastrologist because she was so thin; she became thin through worry on account of domestic difficulties; but I found that she was so impressed by the opinion that she had a weak stomach, and that she must follow a certain dietary, that it became a fixed idea; her life was a misery about diet; she had the idea that she could not digest, and hence would not eat. (6) The treatment of such cases is not gastric stimulants or general tonics, or physical measures at all; the treatment of these patients is to persuade them that they are in reality capable of digesting nourishment, and it is sometimes very difficult to persuade them, because they are called dyspeptic so often by physicians that they find it hard to believe that the disorder is not in the stomach itself. Those are the cases for whom isolation is most applicable.

Another case where the digestive organs were affected was that of a young woman, seen with Drs. Watkins and Staverly, with pain in the region of the appendix, which had been removed two months before. It was discovered that the pain was, in reality, an apprehension of further pain, and also it was re-enforced by the fact that when she had pain she got morphine, which felt very nice. She was cured in two hours by a physician who persuaded her that the pain was really purely imaginary.

Another patient, seen with Dr. J. S. Stone, with appendicitis of six years' standing, finally was operated upon; but the pain persisted because there was a constant reference by the patient to the region formerly painful, which produced a spasm of the ilio-psoas and oblique abdominal muscles of the right groin. Re-education was started by showing the patient how to relax the muscles affected. (7)

Lastly, we must consider the psychogenic mechanism occurring in children. Those are very common and easy to deal with. A child, seen with Dr. Perrie, of McKendree, Ma., who had been kept out of school for a year and a half on account of the advice of the doctor that she was too nervous, and on account of the fact that when her mother attempted to teach her one evening the child could not sleep for four or five hours, which seemed to corroborate the opinion that study made her nervous. This child began with a series of tics, which had been removed in a sanatorium; they had been treated by physicians with arsenic in the belief that they were chorea. They consisted of smacking of the lips and bending down, touching the floor. These movements arose from the child's belief, from the physiology she was taught at the age of five years, that her breath was noxious. She had always been taught that she must never hurt others, but that as her breath was noxious she knew a means to offset its hurt by "the healing kiss." She kissed the air which she expired; that was the source of the movement of the lips which had been interpreted as chorea. The touch of the floor: it had lived; nothing living must be hurt, not even the floor. Her heels were hard, they hurt the floor; she would render this harmless

by another Biblical expedient—"the healing touch"; she would touch the floor with her hands. These are beautiful illustrations of what a child mind can evolve of itself. In reality, this child was not "nervous" at all. She was neither apprehensive nor fidgety, nor irritable, nor of a difficult temperament. She was a natural child, the only difficulty being that she was an only child, and her parents had been somewhat over-anxious. It was explained to the parents that the child lay awake after being taught because the parents had let the child see that they were afraid of it—it was by suggestion that the child stayed awake. When the matter was explained to the parents, the child was sent to school, and the child has been going to school ever since perfectly well. (8)

I might mention many more cases, but I shall not enlarge, and in conclusion I have one more word to say. There are many cases in which the discovery of the ætiology is not of great therapeutic importance and where psychological habits show that a particular proceeding is required for their removal—and I want to quote cases of that kind—the first case is particularly striking. This was a man referred by Dr. T. C. Martin because of a grunting noise which he made with respiration while at the same time he bent his body. This was a tic, a bowing tic. I shall not go into the analysis of when and why it occurred. It was not completed. I shall merely trace the method of removal in contrast to the method which had been used. It had been recognised by the physicians in North Carolina that this was a functional affair and possibly psychological and they had used the method of suggestion; it was an absolute failure. They then used indirect suggestion with failure again. They then used a third method of suggestion, indirect by obtaining from a remote country a powerful drug, guaranteed to cure this particular disease. There was no effect. Such means of psychotherapy should be stigmatised as irrational procedures, although they have often succeeded in removing psychological symptoms. My procedure was different. I reasoned that this bowing tic took place because of a sudden contraction of the recti abdominis and that if the patient could be taught control of the recti and of the diaphragm, the movements would necessarily cease. We then started in to show the patient how to perform the contraction of the recti and of the diaphragm—a very simple procedure which he quickly learned. It should be apparent that when the patient was voluntarily moving his muscles he would not perform the tic, and when he voluntarily contracted the diaphragm he could not make the grunting noise. He learned all this very quickly and was cured, having been seen only twice.

SUMMARY.

Now I might extend this list with a number of cases, illustrating rational removals of psychological situations, but my time forbids. I want to say one or two words in summary.

Spurious treatment of functional nervous disorders means any treatment which does not take account of the ætiology or a treatment which taking account of the ætiology applies such a crude measure as "suggestion" to it; or, treatment which, taking no account of ætiology, but recognising it as functional nature, transfers the patient to the alleged therapy of the commercial which is sanitarium, useless and often detrimental, unless the sanitarium is under the management of a neurologist who has made a study of this kind. In sending the patient to the sanitarium, you are really sending him to another man, to whom the sanitarium is incidental. Now, if we treat these patients, psychological cases, by suggestion, or if we treat them by crude, ill-conceived, misapplied physical measures, or by physiological therapeutics like massage, electricity, distraction, rest, isolation and feeding, we are not doing any better than the people that we are always finding fault with—viz., the Christian Scientists in the name of theology, who treat them by suggestion, not knowing so, or the osteopath and chiropractic, who treat them by suggestion applied in ignorance by means of crude manipulations, without knowledge of the ætiology.

We may cure for a while by suggestion cases which are purely psychological, but this often does a great deal of harm by exalting the patient's suggestibility, which it should be our object to remove in order to prevent future disorders. Now, as to Christian Science suggestion, it is far superior to suggestion that we can give, because it is clothed in the cloak of religion, which gives to it a tremendous appeal; and, secondly, it gives a definite something to hold: "there is no disease," "nothing can be wrong"; whereas medical suggestion merely says "Your arm is not paralysed," "You can speak." This does not take advantage of a universal negation like that of the Christian Scientists, which, after all, has in it something philosophical and is a logical system after all in spite of the illogical presentation in their book. So that, if we adopt suggestion in therapeutics, we are merely using an inferior method which the charlatan can use more effectively. Even massage, a useful means in conditions of asthenia, must be applied in all cases where it is meant to have a definite indication in physical cases, but not used indiscriminately. We then have to distinguish the genetic factor in each case, and when possible to direct our attention to that in order to remove it. When this is not necessary, we must get rid of the effect of that initial cause in cases of physical disorder by the appropriate medical measures we possess, in cases of psychological disorder by creating a mechanism whereby the psychological reactions are re-established in harmony with the environment.

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NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by M. J. Levy-Vallesi, Medecin aide-major of First Class. Subject: "Clinical Characters and Thermal Curve of Paratyphoid Fever."*

ORIGINAL PAPERS.

MILITARY AND CIVIL HOSPITAL PRACTICE—A COMPARISON.

By HAMILTON G. LANGWILL, M.D.ED., F.R.C.P., CAPT. R.A.M.C. (T.).

To anyone who has had the honour and satisfaction of acting as a visiting physician to a large hospital, the termination of his period of service—even after 15 years—comes with no little regret. The care and treatment of patients in a hospital ward in many ways is so much more satisfactory than is possible in private practice that the regret is natural, apart from any personal feelings in severing a tie of fairly long continuance. What a different aspect the management of any serious case in practice assumes when the patient is removed to your hospital ward. Here not only is there generally the

benefit of a resident doctor for any emergency, but the change of environment to a light and airy ward —with a conveniently accessible bed, constant skilled nursing night and day, implicit obedience to orders and freedom from the well-meant but often far from helpful efforts of relatives—renders the case much more manageable.

It was therefore with no slight amount of pleasurable anticipation that the writer, after some years of cessation of hospital duty, responded to the summons to hospital service when war broke out. For though one had for several years held His Majesty's commission in the R.A.M.C. (T.), this carried no duties with it until mobilisation occurred.

The Hospital, being what is termed a General Hospital, draws its inmates primarily from the territorial troops stationed within a radius of some thirty miles; and since this particular area happens to be fairly strongly garrisoned, there has not been available in the wards such a large amount of accommodation for returning Expeditionary cases as with other General Hospitals situated in areas less thickly occupied by troops. Nevertheless a considerable proportion of Expeditionary men from both the Eastern and Western fronts have been admitted, so that the following notes on military as compared with civil hospital practice are based on experiences of both home and foreign service patients.

The writer desires, at the outset, to make clear that he is writing purely from the *medical* standpoint; his position being that of a physician in charge of medical wards, surgical questions (though naturally bulking largely in a war hospital) do not fall within his province.

The first point of contrast, of course, is the wearing of one's outdoor headgear throughout the ward visit, a practice which soon, however, becomes such a habit that one is rather apt to forget to remove one's cap in a private patient's room!

The organisation of the nursing staff offers another point of contrast. The arrangements for a nursing staff were completely drawn up several years before 1914, the mobilisation order being the signal for calling together those nurses who had been already chosen for the staffing of a hospital of 520 beds. What struck one immediately was the fact that *all* of the nurses were *fully trained*—there were no probationers. Nay more, one found that not infrequently the "sisters" had been holding the position of matron in smaller hospitals, while those now under them had themselves often been "sisters." There was thus to some extent—to use a financial phrase—a "writing-down," so to speak, of the various grades of the nursing staff as compared with their position in civil hospitals. Moreover, in a large civil hospital many of the sisters and senior nurses generally have been trained in the institution itself, so that there is a continuity, if one may say so, in the standard of training, and the most junior "pro" thus grows up in the methods and "atmosphere" of that hospital. Here all was different. Not only was there a nursing staff collected together who had been trained in different institutions, but the junior members of it—themselves fully qualified—naturally did not always readily fall in with the methods of some of the (ex-matron) sisters. Moreover, the resumption by the junior nurses of duties usually allotted to a probationer made no small demand upon their stock of patience. The more recent introduction—to fill the vacancies due to nurses sent abroad—of V.A.D. members who occupy the position largely of probationers in civil hospitals, has, in the writer's opinion, rather been an advantage. There is thus restored that blend of nursing ranks which makes for smoother working than if a senior is allotted the work of a neophyte.

As regards the class of cases admitted (referring, of course, merely to the medical wards), several points were noticeable. The variety of patients (due to sex and age) met with in a civil hospital was, of course, not to be expected here. No senile and few degenerative cases may occur—one seldom feels an atheromatous radial artery—but in another aspect the cases in a military ward rather resemble those seen in the rounds of general practice. For whereas in a civil hospital, as a rule, only fairly serious cases are admitted, here comparatively slight ailments—*e.g.*, tonsillitis, febricula, vaccination, or skin troubles, will often be found alongside cases of graver disorder. The soldier in tent, billet, or barracks, if "medically unfit" for duty is sent to a hospital, practically no one being treated as an out-patient. The general aspect, therefore, of a medical ward in a military hospital has not that somewhat depressing "sick-bed" appearance which is often noticeable in a civil hospital with its larger proportion of serious or even hopeless cases.

This contrast is further reflected very markedly in the extremely small mortality rate as compared with civil hospital practice, though another reason, of course, for the low mortality, or (to put it another way) the high recovery rate, is to be found in the *age* of the patients. With patients all in the prime of manhood, recently living for the most part a healthy, active, regular, temperate, outdoor life—all of them being (or supposed to be!) picked lives to begin with—one naturally looks for a high recovery rate, even when serious illness attacks them. Especially noticeable is the comparative rarity, in the writer's experience, of the "alcoholic" type in cases of pneumonia, which was so commonly seen in civil hospital practice.

Another reason for the small death-rate lies in the fact that any case which is regarded as hopeless is at an early date sent before a medical board with a view to his discharge, and, if able to travel, the patient then passes out of the wards of a military hospital. When one recalls one's experience in civil wards, the absence of cases of internal malignant growth is also noteworthy, and the importance of the *age* factor in affecting this incidence is shown by the relatively greater frequency with which such cases as do occur are to be found amongst men in the National Reserve—*i.e.*, mainly over 45.

It is not to be inferred from these remarks that in the medical wards of a military hospital only trivial or uninteresting cases are to be found. On the contrary, apart from the special interest of what one may call "war diseases" (trench-feet, "gassing," etc.), a wide variety of ordinary cases occurs. Especially is this the case in a General Hospital, which draws a large share of its inmates from troops stationed in the neighbourhood. Acute cases of illness (*e.g.*, pneumonia, pericarditis, cerebrospinal fever, etc.) naturally are not to be looked for in the list of *medical* cases brought back in our hospital ships and trains, a large proportion of whom are patients with more chronic, non-pyrexial affections, *e.g.*, sciatica, chronic bronchitis, dilated heart, or convalescing cases of postfebrile debility.

Cases which come under the vague category of indigestion form a very large class, and are amongst the most difficult to deal with satisfactorily. The truth of the saying that "an army marches on its stomach" is constantly borne in on the physician in a military hospital. The men with dental defects —often a broken or missing dental plate—can have their gastro-intestinal troubles, to some extent at least, lessened by appropriate dental treatment; just

as others with decayed stumps can—if they will!—have their digestion improved by removal of these followed by suitable artificial dentures. But there is a much larger proportion of patients whose digestive troubles cannot thus be overcome. So long as they are inmates of a hospital, on suitable light diet, they can usually be relieved of their discomforts, but the difficulty of their *future* dietary still remains. Army regulations do not provide light diet for men *on duty*, but only for those in hospital who are ordered it. Whereas, then, a *civil* case of chronic gastric trouble, returning from hospital to work, can continue at home his light diet and so get along satisfactorily (if not perfectly comfortably), the *military* dyspeptic, on returning to his unit, is supplied no longer with light diet, but with the ordinary rations. Now, with the quality and quantity of this no fault can be found (though the cooking of it in certain circumstances may not be always of the best), but for digestive organs that cannot assimilate beef or mutton—even when well cooked and daintily served in hospital—the ordinary army dinner proves impossible. For such patients it is not "light duty" that is required so much as "light diet" which would enable them to continue to perform ordinary duty. One finds that a large number of the recently mobilised Territorials and Kitchener's Army men have for years, when in civil life, lived upon light diet and regularly carried through a hard day's work upon this, and it is a pity that, on joining the Army, such men should be required to spend so much of their time in hospitals and convalescent homes because of their inability to obtain in barracks a diet which they can digest. A "light diet section" of a regiment—with fare provided accordingly—is doubtless too much to expect; but instead of being recommended by a board, after repeated spells of treatment in hospital, for discharge from the Army, might such men not be utilised by being transferred to duties in connection with *hospitals* in which light diet, or mince, is being provided regularly as part of the daily fare? Such "light diet" men, of course, would be of no use for a draft for foreign service unless they were transferred to another hospital unit where similar facilities could be obtained.

Before passing from the subject of digestive disorders, the writer would allude to a condition not infrequently seen in patients who have been "gassed," viz., the occurrence of an intractable form of retching or vomiting, occurring almost daily. Sometimes the retching had no apparent relation to the presence of food in the stomach, in other instances dinner especially would be rejected. In most of the cases even of long duration it was noteworthy that there was very little evidence of emaciation, so that apart from a certain depression of spirits (sometimes very marked) the man *looked* little the worse.

The great advantage in hospital practice of the methodical and punctual carrying out of orders has already been alluded to, and in a military hospital with all its discipline one might expect this to be even more marked, since the physician pays his ward visit in the position of an officer. And undoubtedly the appearance of a military ward, with its "out of bed" patients standing promptly to attention at the entry of the physician, gives an aspect of smartness which is lacking in a civil hospital. But there is another side to the picture. Paradoxical though it may seem, in a military hospital the physician or surgeon in charge of a ward (even though he may be a Lieut.-Colonel) is not able to exercise over the most newly-joined recruit the power which is vested in any visiting "chief" of a civil hospital! Thus whereas in a civil hospital any patient who declines to have carried out some method of diagnosis or treatment thought necessary (*e.g.*, passing a stomach tube, or tooth-extraction in pyorrhœa, etc.), can be at once dismissed from the ward, this procedure cannot be adopted in a military hospital. The civil patient can be dismissed, and knows he will be, for declining diagnostic measures or treatment advised for him, but the military patient can only be dealt with (by sending him back to his regiment for punishment) for *disobedience* to orders (*e.g.*, smoking if forbidden, getting up if told to keep bed, etc.), not for refusal to allow the doctor's orders to be carried out.

The importance of this difference will be still more appreciated if it is borne in mind that whereas in a civil hospital no patient has any power over another, in a military ward the senior non-commissioned patient in a ward is partly responsible (with the "sister") for the discipline of the other patients. The effect in a ward, therefore, should *e.g.*, a sergeant decline to allow the carrying out of some medical measures ordered for him can thus be realised. A recalcitrant patient in a civil hospital can be at once dismissed and his influence thus absolutely got rid of; not so the military "passive resister." He can be sent back untreated to his regiment, but if he is still medically unfit for duty he will be returned.

It must be borne in mind also that in civil hospitals patients are all there from their own choice, whereas a military patient may be sent there against his wishes, *e.g.*, for observation or with a view to treatment to make him more fit. Nay more, the man may wish to get out of the Service, and therefore not only decline treatment which would improve his fitness, but may be rather inclined to exaggerate his symptoms so that he may be discharged. This, however, would lead on to a consideration of the difficult question of malingering which is outside this article, for that is one aspect in which civil and military hospital experience alike present points rather of similarity than contrast.

DIET AND THE CARE OF CHILDREN'S TEETH.

By SHELDON FRIEL, M.Dent., etc.

Errors in the diet of children are the chief cause of early dental decay, and of malformation of the jaws, which result in irregularity of the teeth and facial disfigurement. It is hardly necesary to point out that food cannot be properly masticated if the teeth are decayed or irregular. Insufficient mastication is a fruitful source of indigestion.

Diet.

If we compare our food with that of barbaric nations, whose teeth are for the most part beautiful, sound and regular, we notice that their food is not soft and sticky like ours. It is owing to the stickiness of our food that particles ferment and produce substances which eat away the enamel and cause decay; and as our food is soft and friable when taken into the mouth, little exertion on the part of the jaws to chew it is required. If an organ is not exercised it does not develop, and unless a child's jaws are exercised they do not grow sufficiently to allow the teeth to erupt in a regular line.

To resume entirely the diet of our early ancestors is out of the question, but it is quite possible by a change in the nature of our food, and in the order in which the various articles of our meals are eaten to prevent the onset of decay and irregularities.

The refinement in the preparation of foods, so

that all fibrous and coarse particles are eliminated; the enormous consumption of sweets and biscuits; the want of contrast in the taste of different articles of diet; and the number of meals and "bits" are the chief faults in our modern diet.

General Principles of Diet.

When the temporary teeth erupt, Nature has designed that the infant should no longer be fed wholly on milk or liquid foods, but on something that requires chewing, as a crust of bread. The child's own instinct, just like a puppy's, is to be always chewing at something, and it is unwise so to prepare all its foods that it has only to give a squeeze of the food between its tongue and palate before swallowing it. By such a method of mastication the food is swallowed without sufficient admixture of saliva, and without any exercise leading to the development and growth of the jaws. It is just as necessary to exercise the jaws as any other part of the body. It is infinitely easier to teach a child of nine months the habit of proper mastication than a child of four or five years, who has already acquired the habit of not chewing.

The majority of foods have a more or less neutral taste which does not tend to a large flow of saliva, therefore it is advisable that there should be a contrast in the taste of the articles of a meal—*e.g.*, beginning the meal with a radish and ending with fruit or savoury.

The liquids of a meal should be reserved to near the end, as they inhibit the flow of saliva and gastric juice. The habit of "bite and sup" is very harmful.

It has been found that any mild acid produces a copious flow of saliva, which tends to neutralise the products of fermentation from the little bits of food remaining around the teeth, which products cause decay. For this reason fruit is strongly advised to be eaten at *the end of every meal.*

Too much emphasis cannot be laid on giving foods that require mastication to children over nine months old.

The following diet is suggested :—

Breakfast.—Porridge, made out of whole oatmeal or "pin meal." It is better than Quaker Oats, Flake Oatmeal, or Hominy.

Grape Nuts, Shredded Wheat, Force or Rusk as a variety occasionally from porridge.

All these with stewed fruit-juice or jam, or sugar and butter, but *not* flooded with milk, as no chewing is then necessary, and there is very little distinctive taste to stimulate a flow of saliva.

Fish, meat, bacon or eggs. If meat is cut up, it should be cut in flat squares about one inch square. It necessitates mastication. Minced meat is not advocated.

Fried potatoes—not mashed potatoes.

Home-made brownbread, toast, pulled bread. No fresh bread; all crusts to be eaten.

Butter. Jam (home-made, if possible).

Diluted milk. Tea, very weak, three-quarters milk.

At the end of the meal a small portion of fruit should always be eaten. Fresh fruit is better than stewed. Apples and oranges are best. Half an apple is quite sufficient.

Lunch at School.—Sandwiches, bread and butter, jam. Cocoa, diluted milk or water, soup as a drink.

Small portion of fruit.

Dinner.—Hors d'œuvre. Very small portion of anything with a very distinctive taste. This is specially advised for children over ten years of age. Vegetable relishes in preference.

Soup. It is of very little nutritive value, and being a liquid, it comes too early in the meal. The very common dinner of bread and soup is not the thing for children. To prepare this is, unfortunately, so easy that it forms the main part of the meal.

Fish, meat, fowl, eggs—no mince.

Vegetables—not mashed up.

Raw vegetables as celery and salads are excellent.

Potatoes, boiled or baked, not mashed.

Plain puddings—not sloppy. Milk puddings, as rice pudding, twice baked.

Stewed fruit.

Savouries; small portion with distinct taste.

Water, diluted milk, home-made lemonade, lime juice.

At the end of the meal always fruit, fresh or stewed.

N.B.—At the end of every meal fresh or stewed fruit should be eaten.

Tea.—Bread—pulled, toast, home-made wholemeal, or baker's bread, not fresh.

Eggs.

Butter.

Jam, home-made if possible.

Tea, very weak, or diluted milk.

Fruit.

Supper.—If any is taken, to consist of a little fruit. Biscuits are not advocated, as they crumble into such fine powder and stick in crevices around the teeth.

It is quite possible that if the whole diet were changed suddenly the child would suffer from indigestion, but if the change is made gradually during three weeks, no ill effects whatsoever should follow.

Cleanliness.

Owing to the finely powdered and sticky nature of so many foods, it is necessary to clean the teeth by artificial means, night and morning. If appliances to correct irregularities of the teeth are being worn, it is necessary to rinse the mouth after each meal. In brushing the teeth, a small brush with fairly hard bristles of uneven lengths should be used. The teeth are brushed in every direction, especially up and down to remove the particles of food between the teeth. The outside of the back teeth should receive special attention.

The following routine is advised for everyday use :—

The mouth first to be rinsed with a small mouthful of the following wash recommended by Mr. Pickerill :—

Potass. tart. ac., gr. ii.
Sodii chloridi, gr. ii.
Aquam, ad oz. i.

The teeth then to be brushed with plenty of warm water and no tooth powder, and finally the mouth to be well rinsed with a mouthful of another solution of Mr. Pickerill's, designed to induce a flow of saliva :—

Potass. tart. ac., gr. ii.
Ac. tartarici, gr. i.
Ol. limonis, m. iii.
Aquam, ad oz. i.

No rinsing with water after this to take the taste away. The same procedure at night time. After each meal the mouth is to be well rinsed with warm water, and then with a mouthful of the second solution. This is especially advisable if appliances are worn in the mouth. It is important to see that each step is carried out regularly each day till the process becomes a "habit."

Sweets, Biscuits and Cakes.

There is no doubt that the constant eating of

sweets and chocolates is most injurious to the teeth and general health, and it is strongly advised that none be eaten between meals. The giving of sweets or biscuits to children just before they go to sleep is pernicious, as it allows the solution of sugar and particles of biscuit to lodge in the interstices of the teeth, and the fermentation products of these substances promote decay. The least harmful of sweets are "acid drops." Money spent on sweets can be devoted to fruit.

BREATHING.

Mouth breathing is one of the greatest causes of irregularities of the teeth. Infants and children should always keep their mouths shut at night time, and if they find it is not possible to do so, the nose and throat should be examined to discover the presence of adenoids or other obstruction.

HABITS.

Such habits as sucking fingers, piece of blanket, comforters, or biting the lips, are injurious to the teeth and should be stopped at once. If they are allowed to continue for some time it is extremely difficult to stop them.

DECAYED TEETH.

It is advisable for children to be brought to their dentist every four months to see if there are any decayed teeth. It is much simpler to fill a small cavity than a large one and not so painful. When a tooth starts to ache it is often too far gone to fill. If irregularities of the teeth occur, they should be corrected without delay, as they are more difficult to treat later. The preservation of the temporary or "baby" teeth is important, for if a temporary tooth is lost prematurely either by decay or extraction, the space for the permanent tooth closes up, and there is no room for the latter when it erupts.

GRAVES' DISEASE AND SYMPATHICECTOMY.

BY ANDRE CHALIER, M.D.,
Of the Faculty of Medicine of Lyons.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

AT a time when the tendency to resort to operations on the thyroid gland for the relief of Graves' disease is becoming more and more pronounced, it may not be out of place to insist once again, with additional cases in hand to support my thesis, upon the advantages and good effects of partial resection of the cervical sympathetic in accordance with the method introduced by the late Professor Jaboulay.

Here is a young chemist's apprentice who has been under medical observation ever since the outset of his disease, and has been treated by several hospital physicians. Notes of his case were published by Dr. R. Lepine in the January, 1910, number of the *Revue de Médecine*. He was suffering from a severe form of Graves' disease with quite a small goitre but extremely pronounced tachycardia and marked exophthalmos, intense tremor and striking nervous disturbances.

After undergoing treatment in vain by innumerable drugs, radiotherapy, etc., Dr. Jaboulay, in December, 1911, performed double resection of the superior cervical sympathetic ganglion, in two sittings. The operative sequelæ were quite uneventful, the temperature never exceeding 102.3° F., and from that time he steadily improved; so much so that about three months after the operation the subject, who had been obliged to relinquish work of every kind, was enabled to resume his occupation, feeling, as he remarked, better than ever before.

At the present time, two and a half years after the bilateral sympathicectomy, he may be regarded as completely cured, and were it not for the exophthalmos, which has diminished but slightly, it would be impossible for anyone to discover any trace of the affection. As you see, he is "well nourished," without corpulence, his mind is quite clear, the heart is quiet and regular, and his hand is free from the slightest trace of tremor. To employ his own words—which express the opinion of those best acquainted with him—he is "quite another man." Here, then, is a case which practically can be looked upon as a complete, permanent cure of two and a half years' standing, to be added to the long list of similar cases comprised in my paper in the *Lyon Chirurgical* in 1911.

The second case is that of a woman, 27 years of age, sent to me by Dr. Plauchu. Here, again, the case was one of typical Graves' disease in which all the cardinal signs of the syndrome were present and several of the accessory symptoms.

On May 7th last, under general anæsthesia, I performed resection of the upper part of the left cervical sympathetic in accordance with Dr. Jaboulay's *technique;* that is to say, I made a long retro-sterno-mastoid resection, cutting through the soft parts, lying on the mastoid process right down to the bone. In doing this I cut through a big vessel giving rise to sharp bleeding. This turned out to be the enormously dilated mastoid emissary vein, which was the size of a penholder. As the vessel had been cut rather obliquely just where it quits the bony canal it could not be seized with forceps and ligatured. The mastoid aperture, through which it passed, was itself rather large, since it admitted without difficulty the blunt end of the largest pressure forceps. The bleeding was temporarily arrested by means of a plug held in position by an assistant. The rest of the operation went off without let or hindrance, and as soon as the sympathicectomy was done the plug was taken away, whereupon the bleeding set in as freely as before. In vain did I endeavour to arrest it by plugging the mastoid orifice with catgut; the catgut was pushed out. It then occurred to me to have recourse to "muscle hæmostasis" introduced by Cushing. A cubical fragment of the sterno-mastoid muscle was removed and pushed into the mastoid canal. This "muscle stopper" was kept in position with the finger for a few seconds and then fixed *in situ* by the aid of two or three sutures, bringing together the soft parts—periosteum, aponeurosis and muscles over it. From that moment the bleeding ceased and there was no recurrence. The operative sequelæ were uneventful, and after the fourth or fifth day the patient began to feel better, and was really better both objectively and subjectively. This improvement has steadily proceeded since that time, so that I anticipate shortly being in a position to class the case as a definitively successful one.

Apart from the interest of this case as bearing on the method which I recommend, it presents a special point of interest in that the patient presented an enormously dilated emissary mastoid vein, though this fact ought not to cause any surprise in view of the usual vaso-motor disturbances associated with Graves' disease. In addition to this was the mastoid anomaly exemplified in the unusual size of the mastoid venous canal. It also shows the advantage to be gained from using the "muscle plug" in cases of bleeding which happens to be difficult to control.

I do not, of course, deny the good results to be obtained by thyroidectomy in cases of Graves' disease associated with a big goitre; in such cases, indeed, the latter operation is to

be preferred. But *cæteris paribus* I feel convinced that for everyone who is familiar with the surgery of the neck, resection of the superior cervical ganglion of the sympathetic will appear easier and, operatively speaking, milder than thyroidectomy, which necessarily remains less methodical, less identical in all cases, and exposes the patient to serious accidents, more particularly to pulmonary complications and hæmorrhage. Then, too, I feel very strongly, from the experience of the cases I have met with and followed up, that the immediate and remote effects of thyroidectomy are less satisfactory than those of sympathicectomy. I can recall two cases of the kind in which the patients were thyroidectomised by Dr. Jaboulay two or three years ago. In one case, that of a young woman, in which we had removed part of the thyroid we saw her on several occasions afterwards, and the portion of the gland removed was gradually being reconstituted, until ultimately it was larger than before the operation. With this thyroid regeneration, the nervous disturbances which had at first improved after our intervention returned. I proposed sympathicectomy in this case, but the patient refused it, having lost faith in the value of surgical interventions for the cure of the disease. I also saw recently an upholsterer, 50 years of age, who was thyroidectomised two years ago, yet he is subject to recurring attacks of nervous excitement, tachycardia and depression the like of which I have never met with after sympathicectomy.

In Dr. Jaboulay's statistics I only remember one case of sudden death after sympathicectomy, and in that instance *post-mortem* examination showed marked hypertrophy of the thymus, to which the fatal result was, in my mind very properly, ascribed. I do not attach much importance to hypertrophy of the thymus in Graves' disease in spite of the, in several respects, contradictory works of German authors on the subject. I have made careful search for evidence of hypertrophy of the thymus in twelve sympathicectomised or thyroidectomised patients, by radioscopy and by percussion, without succeeding in satisfying myself of its existence. I have even examined the bodies of several patients who had suffered from Graves' disease after death from the (unoperated) progress of the disease, without in any one instance finding a hypertrophied thymus gland, so that I fail to see any valid reason for aggravating an already grave operation by a concomitant operation on the thymus.

In conclusion, since we are by no means in possession of certain knowledge of the pathogenesis of Graves' disease, why should the majority of surgeons look askance on the operation of sympathicectomy, which, after all, is physiologically a perfectly logical operation; one, too, which, in most instances, yields excellent results.

SOME BRITISH MEDICAL MEN OF LETTERS.*

PART II.

By W. H. MAIDLOW, F.R.C.S.

(*Concluded from page* 32.)

JOHN KEATS is the poet-medical student of the last century. We know he was apprenticed to Dr. Hammond at Enfield, and in 1813 worked at Guy's and St. Thomas's, where he mixed a good deal of poetry with his medical studies. He got a medical(*a*) qualification in 1815, and seems to have kept up throughout his too short life some little interest in medicine—quite enough, indeed, to realise the import of his own symptoms. But inclination to literature, and his disease, pulmonary tuberculosis, soon made him abandon the active practice of medicine; travelling in search of health, and, with an unreturned love for Fanny Brown, he died unmarried at the age of 26 in the arms of his friend Severn at Rome, on October 23rd, 1821. Whilst at Guy's he wrote "La Belle Dame Sans Merci."

"Oh what ails thee, knight-at-arms,
Alone and palely loitering?
The sedge has withered from the lake
And no birds sing."

He left us the lines :—

"Beauty is truth, truth beauty:
That is all we know on earth and
All ye need to know."

And his immortal "St. Agnes' Eve" (January 20th) :—

"St. Agnes' Eve, ah! bitter chill it was—
The owl, for all his feathers, was a-cold;
The hare limp'd trembling through the frozen grass,
And silent was the flock in woolly fold;
Numb were the Beadsman's fingers, while he told
His Rosary, and while his frosted breath
Like pious incense from the censer old
Seem'd taking flight for Heaven, without a death,
Past the sweet Virgin's picture, while his prayer
he saith."

The famous OLIVER GOLDSMITH was born at Pallas, Ireland, in 1728, the son of a cleric, probably the prototype of the "Vicar of Wakefield." After trying various forms of occupation he went to Edinburgh to study medicine, but soon left Edinburgh for the great European tour, with little more than a penny in his pocket. He always said he obtained an M.D. of Padua, but this is extremely doubtful. Returning to England, he made some vain endeavours to practise medicine; was rejected by the R.C.S. in 1758. On one occasion was urged only to treat his enemies! He finally gave up all idea of medicine and got some humble literary work. Then he attracted the attention of Dr. Johnson, who retained till the end a great affection for him. He became one of the original nine members of the Literary Society and in the first rank of writers. He died in 1776, £2,000 in debt, which Dr. Johnson said showed him to be a great man. A warm-hearted, generous man, full of genuine love and pity for humanity, his writings possess that native charm of style so difficult to acquire by mere learning or education. Johnson wrote for his epitaph in Westminster Abbey in Latin :—"He touched nothing which he did not adorn." He has bequeathed to us "The Vicar of Wakefield" and "The Deserted Village," amongst other great works.

"At church with meek and unaffected grace
His looks adorn'd the venerable place,
Truth from his lips prevailed with double sway,
And fools who came to scoff remain'd to pray."

You may remember the story of Johnson selling the MS. of the "Vicar of Wakefield" for £60 to pay Goldsmith's debts to his landlady.

JOHN WOLCOT, better known as "Peter Pindar," deserves passing mention, although his literary work is now read chiefly by people who stumble across it or collect the quaint. Devonshire claims him and his several ancestors who had practised medicine before him. He was born at Dodbroke in 1738, qualified M.D.Aberd., went with Sir William Trelawney to Jamaica, where he seems to have acted in the varied capacity of doctor, secretary, chaplain and steward. Once the King of the Mosquitoes asked for more alcohol. "Your Majesty is drunk already." "Me drink the whole ocean!" replied His Majesty! When there was the scantiest of congregations, or he wanted to get off for some sport, they would buy off what might have formed a quorum. People would come in order to be "bought off" when this became known. As can

*A paper read before the Ilminster Literary Society.
(*a*) I find this is not so.—W. H. M.

be read in his "Physic and Delusion," he had no great affection for medicine.

One of his claims to fame, and his best, is his discovery of the artist Opie. Him he introduced to London as the "Cornish Wonder." He was, too, patron of another Cornishman, Bone, the painter in enamel.

Wolcot died at Somers Town, 1819.

Erasmus Darwin, who lived from 1731 to 1802, deserves also mention. He is remembered now chiefly as the grandfather of the great "Charles," the apostle of the theory of evolution; but the grandfather also was an exceedingly great man. He foreshadowed the evolutionary theory in his long poem, "The Lives of the Plants."

The Darwins are a most remarkable family of geniuses. The son of Erasmus was a physician above the average, and his grandson was the immortal Charles Darwin, who had two sons—one a professor of astronomy and the other professor of biology—both of them F.R.S. They intermarried with the Wedgwoods of pottery fame, who were related to the Hollands, who were related to Mrs. Gaskell; and Sir Douglas Galton, the great eugenist, is another member of the family.

The works of Charles Lever, who practised medicine in various parts of Ireland and in Brussels, are not much read now; but in my boyhood "Harry Lorrequer" and "Charles O'Malley" were standard books—books full of rollicking humour, a wealth of anecdote, and a rarely flagging vivacity.

Francis Thompson, mystic, who must not be confused with James Thomson, pessimist, author of "The City of Dreadful Night," does not come next in chronological order, but he belongs to the group of three who had but comparatively little to do with medicine. Like Keats, his life was saddened by disease, and, like De Quincey, Coleridge and Rossetti, he became the victim of certain drugs not conducive to the health of a normal citizen, manifestation though it may be of the waywardness of genius. As a youth he was sent to Owens College, Manchester, to study his father's profession of medicine. But all went wrong, and medicine as a profession was abandoned. He was left stranded on the rocks of disease, and was discovered in the streets of London selling his poems and hawking. Kind friends restored him to some health and happiness, but he died, aged 48, just as he was becoming known outside his own little circle, in 1907. This is how he was once helped in the street:—

"I waited the inevitable last,
Then there came past
A child like thee, a spring flower
Fallen from the budded coronal of spring,
And of her own scant pittance did she give
That I might eat and live,
Then fled, a swift and trackless fugitive."

His finest piece of sustained writing is, of course, his "Hound of Heaven." In this one can see all his qualities standing revealed—his amazing exuberance, mountains of mystical detail, fertility of imagery, and his mastery of metrical effect, as Mr. Chesterton says somewhere, "his sudden and sacred blasphemies."

"I fled Him down the nights and down the days,
I fled Him down the arches of the years,
I fled Him down the labyrinthine ways
Of my own mind; and in the midst of tears
I hid from Him, . . .
From those strong feet that followed, followed after."

Dr. Macbeth Moir (1789-1852) was the famous "Delta" of Blackwood's Magazine. He faithfully performed his work of medical practitioner in Edinburgh, where he was well known. The four hundred poems he wrote are now out of fashion; but his "Life of Mansie Wauch" is one of the rather celebrated books of genuine sketches of Scotch character. I must say, however, I have tried to read it without success.

I will conclude with a sketch of the life of one of my favourites, Dr. John Brown, the author of "Rab and His Friends" and "Marjorie Fleming." I think I could interest you a whole literary evening in the life and work of this man, than whom no gentler or kinder soul ever lived. Goodness of a broad human kind, free from all feebleness and conventionality shine through the pages of his works.

Born in 1810, he became M.D. of Edinburgh in 1833. He was the descendant of three generations of learned ancestors. The celebrated Syme, probably the surgeon in "Rab," was the first master for whom he ever felt the greatest respect, both as a man and a surgeon. His practice was never extensive, for he was too retiring and never a seeker of popularity. But he was loved and respected by all who knew him as a faithful friend and physician in whom all secrets were safe, whose ear was never deaf to sorrows and anxiety, whose visits were like a gleam of sunshine.

Mrs. Seller wrote of him: "No one had such delight in such a variety of human qualities than he—provided only they were genuine. The rugged humour of a carter, the grace of a high-bred woman, the wit of a man of the world, the innocence of a child—all were dear to this man who was dear to God." She goes on to say: "More than once when I have been prostrate in the dark with headache I have sent the message, 'Mrs. Seller's compliments, and she is too ill to see the doctor' (a joke which he was constantly retailing against himself). I waste little of his visits on professional talk."

It was after his marriage in 1840 that Dr. John Brown drifted, as it were, to writing, but at no time did it interfere with his main life's work—that of medicine.

Thackeray, at a dinner given in his honour, spoke of him thus:—"I know you will join with me in acknowledging the worth, kindness and goodness of a gentleman you all know, and whose goodness I shall always remember."

He kept up his interest in medicine to the end of his life. To him the Great Consoler came in the evening of his days when all the shadows of his life seemed to have resolved in tranquil shade.

Swinburne wrote:—

"He had gone to some happy island in the Elysian Sea,
Where Rab may lick the hand of Marjorie."

Everyone must read "Rab and His Friends" and "Marjorie Fleming." Three of his great medical tenets were:—

(1) The doctor should be able or willing to cure us—that is what he is here for.

(2) He should be sincere, attentive and tender, keeping his time and our secrets.

(3) He must tell us all that is good for us to know and no more.

What Landseer is upon canvass, Dr. John Brown is upon paper. The canine family was never so well represented in literature. I regard him as one of the best exponents of this essay. He was not only a good doctor but a good man of letters. Now he is where "Beyond these voices there is Peace." Keep his "Horæ subsecivæ" in your bookshelves in memory of him.

In conclusion, I have, pageant-like, shown you a procession of medical men who were in their day, and still are, more or less famed for their intimate association with English literature. To some extent they throw a light also on the history of medicine which may be not without interest. The power and originality of modern medicine, the vigour and success with which it has opposed scientific methods of observation and experiment to

the old reverence for systems, inevitably tend to create some contempt for medical history—a half-confessed feeling that we are the men and knowledge was born with our generation. But study the history of medicine, and those of us who are so apt when in health to cast unmerited ridicule or sarcasm on medical aid, and so readily when health fails to run after every new "cure," will find history repeating itself. What is new is not always true, and is often discarded by many as "tried and failed."

By such a study also we learn something of the nature and complexity of medical problems, something of the labours of those great men who have by slow and painful steps advanced the bounds of knowledge. In the words of the great Laureate of Medicine, O. W. Holmes:—

"Always striving in the unequal contest with the hundred-armed Giant who walks in the noonday and sleeps not in the midnight.

"As Life's unending column pours,
Two marshalled hosts are seen,
Two armies on the trampled shores
That Death flows black between.
One marches to the drum-beat's roll,
The wide-mouthed clarion's bray,
And bears upon a crimson scroll
'Our Glory is to slay.'

"One moves in silence by the stream
With sad yet watchful eyes,
Calm as the patient Planet's gleam
That walks in clouded skies.
Along its front no sabres shine,
No blood-red pennons wave;
Its banner bears that single line—
'Our Duty is to save.'"

Both armies indeed fight to save. Who shall say to which the greater glory?

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

QUACKERY AND THE ETHICS OF JOURNALISM.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—One of your correspondents suggests that I "try to get at the root of things"; but surely this is not a singular attitude among men of science, least of all among medical men of science. I know not whether there still exist any *bona-fide* followers of that pre-scientific dreamer Hahnemann—whether there are still to be found men, who, having undergone a medical education can yet believe that the symptoms constitute the disease and that by suppressing the symptoms they can put an end to the malady. Scientific medical men note and weigh signs and symptoms in forming a diagnosis, and although they may with caution often attempt to alleviate suffering by treating pain or discomfort with an anodyne, they know very well that in doing so they are not touching the *fons et origo mali*. Morbid signs and symptoms can be done away with only when we have put an end to the pathological processes, of which they are the manifestations. The observations which apply to a single person apply also to the social maladies of the people—what we call the body politic There exists some deep-seated malady at the root of the symptoms of what is now called neo-commercialism—a cult, the votaries of which devote themselves to the acquisition of wealth by every foul means, undeterred by moral considerations and constrained only by fear of condign punishment. Signs of this malady of the body politic, of which I do not pretend to know the nature, are found in the work of the City shark and in the performance of medical quacks of all denominations. Neo-commercialism is a contagious moral disease. We cannot at present cure it. We can deal with it only as we deal with certain infectious diseases of cattle, namely, by stamping it out. We can stamp it out by constructing the simple laws which would make punishment for these crimes swift and certain. It is said that the receiver is worse than the thief, but it is quite certain that if there were no thieves there would be no receivers. Once put down quackery and the careers of those who share its plunder, including hypocritical newspaper proprietors who pose as lay preachers of morality, whilst amassing wealth by knowingly conniving at fraud, would be at least beneficially curtailed. Finally, I would personally thank you for the persistency with which you have kept this subject to the front. My knowledge of it and my recognition of its importance have been entirely acquired from the reading of your paper during the six or seven years I have been a subscriber. I thank you especially for so forcibly drawing attention to the report of the Select Committee on Patent Medicines. This document, with the evidence of witnesses, forms one of the most interesting pieces of literature that have appeared during the past eighteen months. It is to a large extent made up of real "human documents," and should be of absorbing interest to every latter-day sociologist.

I am, sir, yours truly,
A STUDENT OF SOCIOLOGY.

January 14th, 1916.

THE DISCOVERY OF ANÆSTHESIA.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Permit me to thank you for your favourable editorial notice of my contribution, "C. W. Long," and to say that I think that W. T. G. Morton's part in the introduction of anæsthesia is absurdly overrated, and is almost wholly due to the enthusiasm begotten of the successful anæsthetisation of Gilbert Abbott, Dr. Warren's patient.

Morton's claim to the discovery was the subject of a deeply interesting monograph, "A History of the Gift of Painless Surgery," by E. Waldo Emerson, in 1896. He remarks: "The heat of the controversy has passed away and the claimants are gone. The evidence remains. It is to this . . . that the present generation should look in assigning the meed of gratitude and praise for this discovery." E. Waldo Emerson has made clear that any knowledge Morton had of anæsthesia was obtained from America's distinguished geologist and chemist Charles Thomas Jackson—a view I put forward in 1886. Those familiar with the history of the discovery need not be told that Jackson heard of C. W. Long's etherising patients, and visited him in Jeffersonville, Georgia, and solicited Dr. Long to acknowledge him as a fellow-worker in the discovery. This fact, which is well authenticated, was not known to E. Waldo Emerson, who accepted the dates given by Jackson for his experiments with ether.

Before settling down in Boston, Jackson made a tour of the principal European cities. He studied in London and Paris, conversed with men who had known Priestley, Beddoes, Davy, Cullen, Dalton, Lavoisier, and others. He knew of the inhalation of ether as a therapeutic agent, and learned to produce "fictitious airs." He lived in Paris when all France honoured and read Honoré de Balzac, and

"Ursule Mirout," in which the author gives such a vivid picture of the power of hypnotism, would undoubtedly excite an interest in the student for information on Esdaile's work in India; and all the more so as Velpeau was at that time operating on hypnotised patients.

When we recall to mind that these facts were common knowledge, it is unaccountable to find that in the "Address of Welcome" of the President of Massachusetts General Hospital on October 16th, 1896, the Gilbert Abbott operation is said to have been the first surgical operation under which the patient suffered no pain, no discomfort, no anxiety." And another speaker on the same occasion declared: Fifty years ago to-day occurred the first authentic, unquestionable, public exhibition of anæsthesia during a surgical operation." At best, Morton's claims to the discovery rest on an ignorance of the past; to the suggestion of ether by Jackson; and, most unhappily, to a greed of gain. The very name "letheon" stifles sympathy for his fate.

I am, Sir, yours truly,
GEORGE FOY.

Dublin,
January 13th, 1916.

SPECIAL CORRESPONDENCE.

FROM OUR OWN CORRESPONDENTS.

SCOTLAND.

COL. H. A. THOMSON, A.M.S.

AMONG the recipients of honours whose names appeared in the list recently published is Professor Alexis Thomson, at present acting as a Consulting Surgeon to the Expeditionary Force, who has been appointed Companion of the Order of St. Michael and St. George.

SANATORIUM TREATMENT AND MUNICIPAL ECONOMY.

A reply to the statements of the Edinburgh City Chamberlain as to the futility of expenditure on sanatorium treatment is contributed to the *Scotsman* of January 10th. Exception is taken to the statement that the cure of the individual and the eradication of the disease cannot be attained by sanatorium treatment. The contributor, who obviously supports the present system, goes over the familiar ground. If cases are got early, the results are good; if they are got later, they improve; if they do not improve, their pains are lightened. He urges that the Chamberlain's report depends on a misconception of the views of the Medical Officer of Health and of the Tuberculosis Officer, who, when they speak of housing and other antituberculosis measures, do not go further than to suggest that sanatorium treatment must be backed by other measures—"by the fearless exercise by a local authority of all its sanitary powers." The article then goes on to suggest that neither the housing crusade nor the sanatorium system can stand alone, and it enumerates the many other social factors to be considered—density of population, milk supply, temperance, etc., and finally argues that by giving up the present system the Corporation will spend £6,300 more, and get for its money 70 beds fewer, than at present. The contributor of the article states his case well, and his views will no doubt be thoroughly considered before any radical changes are made in antituberculosis work in Edinburgh.

REGISTRATION IN THE MEDICAL SERVICE.

The Scottish Medical Service Emergency Committee urgently request those doctors who have not filled in their registration forms to do so without any further delay and to forward them to the secretary of the Committee at the Royal College of Physicians, Edinburgh.

GIFT FOR MEDICAL RESEARCH.

Sir Alexander M'Robert has given to Aberdeen University an endowment of about £750 per annum for a Georgina M'Robert Lectureship on Pathology, with special reference to malignant diseases.

The donor recently gave an endowment of £373 per annum to the Aberdeen Royal Infirmary. He is manager and director of the Cawnpore Woollen Mills Company, Ltd., but before going to India 30 years ago he was Neil Arnott, Lecturer in Experimental Physics at the Aberdeen Mechanics' Institution and Lecturer in Chemistry at Robert Gordon's College, Aberdeen.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF MEDICINE.

MEETING HELD FRIDAY, NOVEMBER 12TH, 1915.

The President, J. A. LINDSAY, M.D., F.R.C.P., in the Chair.

SOME OBSERVATIONS UPON THE ELECTROCARDIOGRAPH, WITH NOTES OF CASES.

THE PRESIDENT read a paper upon the above. He said that amongst the recent advances in medicine an important place must be assigned to the development of instrumental methods of observation in connection with the heart in health and in disease. The polygraph and the electro-cardiograph had opened up a new chapter in this field, and had rendered many former observations more or less obsolete. While too much importance could not be assigned to a careful observation of the whole clinical complex, instrumental methods added new and important facts. By their agency the heart wrote its own message, and the cardiac script could be interpreted with increased precision as the work of observation and experiment went on. The phenomena of disease were thus presented at first-hand, and the duty of the clinician was that of interpretation. These methods were of special value in certain departments where the difficulties of diagnosis were formerly greatest, as, for example, in the differentiation of the cardiac arrhythmias, the detection of heart-block and of auricular fibrillation, and, in general, in the recognition of myocardial changes. The history of electrocardiography was briefly summarised. The structure of the electro-cardiograph and the methods of employing the instrument were described, and the electrical phenomena of the normal heart explained. The chief applications of the instrument in disease were then dealt with, the following conditions being passed under review—viz., heart-block, auricular fibrillation, auricular flutter, myocardial degeneration, extrasystoles, and hypertrophy of the ventricles. In these various conditions the electro-cardiograph gave first-hand information, confirming a diagnosis which in some cases with the older methods of observation did not rise above a high degree of clinical probability. Electro-cardiography was probably destined to throw light upon the action of drugs, especially that of the cardiac remedies of the digitalis group. Electro-cardiography could not be expected to throw direct light upon valvular lesions. Its message was from the cardiac musculature, not from the cardiac valves. None of the usual valvular lesions had a precisely distinctive cardiogram, though that of mitral stenosis could sometimes be recognised. Hence, a normal electro-cardiogram was no guarantee of a normal heart.

But valvular lesions sooner or later produced muscle changes, and these wrote their story upon the cardiogram. The general question of the differentiation of the cardiac arrhythmias by mean of the electrocardiograph. was discussed. In conclusion, the speaker deprecated any exclusive reliance upon instrumental methods. They were to be regarded as important adjuncts to the usual clinical procedures. The final test of cardiac sufficiency or insufficiency must remain the appeal to experience and to clinical observation. Science was, however, essentially measurement. Clinicians craved precision, and towards this end instrumental methods afforded an important contribution.

The paper was illustrated by numerous diagrams, tracings and a lantern demonstration.

Professor THOMPSON referred to the numerous difficulties in the employment and interpretation of the method, but expressed the belief that time would elucidate the majority of these. He pointed out that while the p-r distance was important, the "t" wave was even more so, as showing whether ventricular contractions were dropped or not. The electrocardiograph was a clinical instrument, and it was noteworthy that its employment in the hospital in Belfast preceded the laboratory work. Every hospital would have to provide itself with the apparatus in the near future.

Dr. LITTLE, in adding his thanks, regretted that the meeting synchronised with one of the worst storms ever experienced in Dublin, which had, doubtless, prevented many, at least of the older members, from attending. His acquaintance with the instrument was confined to the literature of the subject, and as he deprecated the use of such complicated apparatus without full knowledge, he would refrain from a technical discussion.

The PRESIDENT, in reply, said that while the tracings shown were not entirely his own work, practically all had been obtained in the Victoria Hospital, Belfast. He was not a devotee of instrumental methods, which could never replace trained clinical observation, but they had one most important quality—namely, the elimination of the personal factor.

RECENT MEDICAL CLINICAL EXPERIENCES.

SIR JOHN MOORE read a paper on the above subject, which was printed in the MEDICAL PRESS AND CIRCULAR, December 22nd, 1915.

SPECIAL REPORTS.

ARMY MEDICAL HONOURS AND PROMOTIONS.

A SUPPLEMENT to the *London Gazette* issued on January 13th contains the following record of honours and awards for services in connection with the war:—

ORDER OF THE BATH.

The King has been graciously pleased to give orders for the following promotions in, and appointments to, the Most Honourable Order of the Bath, for services rendered in connection with military operations in the field:—

To be Additional Members of the Military Division of the Third Class, or Companions, of the said Most Honourable Order.—Surgeon-General Richard W. Ford, D.S.O., Col. Blenman B. Crayfoot, M.D., Indian Medical Service, Colonel James Maher, Army Medical Service, Colonel Michael J. Sexton, M.D., A.M.S., Colonel John J. Russell, M.B., A.M.S., Colonel Edward G. Browne, A.M.S., Lieutenant-Colonel (temp. Colonel) Walter C. Beevor, C.M.G., M.B. (retired pay), R.A.M.C., Major (temp. Colonel) Henry McI. Williamson Gray, M.B., F.R.C.S., R.A.M.C. (T.F.), Temporary Colonel Sir Bertrand E. Dawson, K.C.V.O., M.D., R.A.M.C. (T.F.). Australian Force: Colonel (temp. Surgeon-General) Michael W. Russell, Dep. Director-General, A.M.S., War Office.

SAINT MICHAEL AND SAINT GEORGE.

The King has been graciously pleased to give directions for the following promotions in, and appointments to, the Most Distinguished Order of Saint Michael and Saint George, for services rendered in connection with military operations in the field:—

To be Additional Members of the Third Class, or Companions of the said Most Distinguished Order.—Colonel William W. Pike, D.S.O., F.R.C.S.I., Army Medical Service, Colonel Charles E. Nichol, D.S.O., M.B., A.M.S., Colonel Bruce M. Skinner, M.V.O., A.M.S., Lieutenant-Colonel and Bt. Col. Frederick Smith, D.S.O., R.A.M.C., Colonel George D. Hunter, D.S.O., A.M.S., Temporary Colonel John Atkins, M.B., F.R.C.S., A.M.S., Temporary Colonel William T. Lister, M.B., F.R.C.S., A.M.S., Colonel Charles A. Young, A.M.S., Colonel Stuart Macdonald, M.B., A.M.S., Colonel Gerald T. Rawnsley, A.M.S., Temporary Colonel Cuthbert S. Wallace, A.M.S., Temporary Colonel Henry Alexis Thomson, M.D., F.R.C.S., R.A.M.C. (T.F.), Lieutenant-Colonel Ransom Pickard, M.D., R.A.M.C. (T.F.), Lieutenant-Colonel Alfred Bertram Soltau, M.D., R.A.M.C., (T.F.)., Lieutenant-Colonel John Archibald Hamilton, M.B., F.R.C.S., I.M.S., Lieutenant-Colonel Alexander Dunstan Sharp, R.A.M.C. (T.F.), Lieut.-Colonel (temp Colonel) Harry Alexander Hinge, R.A.M.C., Lieutenant-Colonel Alexander Milne-Thomson, R.A.M.C. (T.F.), Lieutenant-Colonel Winsmore Hooper, D.S.O., R.A.M.C., Lieutenant-Colonel George Abraham Moore, M.D., R.A.M.C., Lieutenant-Colonel James Robert McMunn, R.A.M.C., Lieutenant-Colonel Claude Kyd Morgan, M.B., R.A.M.C., Lieutenant-Colonel Frederick Kiddle, M.B., R.A.M.C., Lieutenant-Colonel William Henry Snyder Nickerson, V.C., M.B., R.A.M.C., Lieutenant-Colonel Frederick Septimus Penny, M.B., R.A.M.C., Lieutenant-Colonel Jonas William Leake, R.A.M.C., Lieutenant-Colonel Francis John Brakenridge, R.A.M.C., Lieutenant-Colonel Arthur Chopping, R.A.M.C., Lieutenant-Colonel Henry Edward Manning Douglas, V.C., D.S.O., R.A.M.C., Lieutenant-Colonel Langford Newman LLoyd, D.S.O., R.A.M.C., Temporary Hon. Lieutenant-Colonel Charles Gordon Watson, F.R.C.S., No. 1 British Red Cross Hos.; Major William Bertie Mackay, M.D., R.A.M.C. (T.F.), attached Northumberland Fusiliers (T.F.); Major Hamilton Maxwell Cruddas, I.M.S., Major William Riach, M.D., R.A.M.C., Major Percival Davidson, D.S.O., M.B., R.A.M.C.

Australian Force.—Lieutenant-Colonel Thomas Morgan Martin, Comm. No. 2 Australian General Hospital

Canadian Force.—Colonel Murray MacLaren, Canadian A.M.C., Lieutenant-Colonel George Gallie Nasmith, Canadian A.M.C., Lieutenant-Colonel Arthur Edward Ross, Canadian A.M.C., Lieutenant-Colonel William Henry Parkes, M.D., F.R.C.S., Comm. New Zealand Hospital.

MILITARY PROMOTIONS.

His Majesty the King has been further pleased to approve of the undermentioned rewards for valuable services rendered in connection with the war:—

To be Brevet-Colonels.—Lieut.-Colonel A. J. Macnab, F.R.C.S., I.M.S., Lieut.-Colonel J. M. Sloan, D.S.O., M.B., R.A.M.C.

To be Brevet Lieutenant-Colonels.—Major H. Boulton, M.B., I.M.S., Major G. Browse, M.D., I.M.S., Major F. G. Fitzgerald R.A.M.C., Captain M. G. Dill, M.D., R.A.M.C., Captain C. N. Draycott, R.A.M.C. (T.F.), Captain C. H. S. Frankau, M.B., F.R.C.S., R.A.M.C. (T.F.), Captain R. C. Ozanne, R.A.M.C. (S.R.), Captain R. G. H. Tate, M.D., R.A.M.C.

To be Honorary Captains—M. Cohen, R.A.M.C. (T.F.), G. W. Harris, R.A.M.C. (T.F.), I. Keogh, R.A.M.C. (T.F.), J. H. Maunder, R.A.M.C. (T.F.), H. C. Okill, R.A.M.C. (T.F.).

COMPANIONS OF THE DISTINGUISHED SERVICE ORDER.

Major Ralph Bignell Ainsworth, R.A.M.C., Major Ernest Brabazon Booth, M.D., R.A.M.C., Major George Herbert James Brown, M.B., R.A.M.C., Major James Pearson Brown, M.B., R.A.M.C. (T.F.), Major Bernard Bruce Burke, R.A.M.C., Major James Hamilton Campbell, M.B., R.A.M.C., Major Patrick John Hanafin, R.A.M.C., Major Daniel Litton Hard-

ing, F.R.C.S.I., R.A.M.C., Major James Andrew Hartigan, M.B., R.A.M.C., Major Arthur Edmund Stewart Irvine, R.A.M.C., Major Nelson Low, R.A.M.C., Major Alban Anderson Meaden, R.A.M.C., Major Richard Arthur Needham, M.B., I.M.S., Major Michael Balfour Hutchison Ritchie, M.B., R.A.M.C., Major Frederick Emilius Roberts, R.A.M.C., Major William Francis Roe, R.A.M.C. (T.F.), Major James Samuel Yeaman Rogers, M.B., R.A.M.C. (T.F.), Major Eugene Ryan, R.A.M.C., Major Francis Cornelius Sampson, M.B., R.A.M.C., Major Arthur Briton Smallman, M.D., R.A.M.C., Major Richard James Campbell Thompson, R.A.M.C., Major Charles Harold Turner, R.A.M.C., Captain John Downie, M.B., R.A.M.C. (T.F.), Captain Joseph Wilfred Houston, M.B., R.A.M.C., Captain William Porter MacArthur, M.D., F.R.C.P.I., R.A.M.C., Captain Edward Michael O'Neill, M.B., R.A.M.C., Captain Frank Worthington, M.B., R.A.M.C., Temporary Lieutenant John Fraser Steven, M.B., R.A.M.C.

THE MILITARY CROSS.

Captain Jonas William Anderson, M.B., R.A.M.C. (T.F.), Captain David Charles Gordon Ballingall, M.B., R.A.M.C., Captain Henry Cuthbert Bazett, M.B., F.R.C.S., R.A.M.C. (S.R.), Captain Frederick Arnot Bearn, M.B., R.A.M.C. (S.R.), Captain Edward Charles Beddows, R.A.M.C., Temp. Captain Lancelot Gerard Bourdillon, R.A.M.C.., Captain John Errol Moritz Boyd, R.A.M.C., Captain Noel Godfrey Chavasse, M.B., R.A.M.C. (T.F.), Captain Albert Geo. William Compton, R.A.M.C. (S.R.), Captain Harry Slater Cormack, M.B., F.R.C.S., I.MS., Temp. Captain Robert Ewart Cree, M.B., R.A.M.C., Temp. Captain Claude Gordon Douglas, M.D., R.A.M.C., Captain John Cecil Alexander Dowse, M.B., R.A.M.C. (S.R.), Captain Philip Gordon Moss Elvery, R.A.M.C., Captain Roger Errington, M.B., R.A.M.C. (T.F.), Captain Eric Alfred Charles Fazan, R.A.M.C. (T.F.), Temp. Captain James Henry Fletcher, R.A.M.C., Temp. Captain William Foot, M.B., R.A.M.C., Captain Robert Forgan, M.B., R.A.M.C. (S.R.), Captain Archibald John Gilchrist, M.B., R.A.M.C. (S.R.), Captain Owen Hairsine, R.A.M.C. (S.R.), Captain Travis Hampson, M.B., R.A.M.C. (S.R.), Captain Frederick Duke Gwynne Howell, R.A.M.C., Temp. Captain Henry Rylands Knowles, M.B., R.A.M.C., Captain Stanley Dermott Large, R.A.M.C., Captain Hyman Lightstone, R.A.M.C. (T.F.), Captain (temp. Major) Edgar Rainey Ludlow-Hewitt, Royal Irish Rifles and R.F.C., Temp. Captain Eric Francis Wallace Meckenzie, M.B., R.A.M.C., Captain John MacMillan, M.B., R.A.M.C. (T.F.), Temp. Captain John Richardson Marrack, M.B., R.A.M.C., Captain William Hilgrove Leslie McCarthy, M.D., R.A.M.C., (S.R.), Captain Campbell MacQueen, R.A.M.C., Temp. Captain George Millar, M.B., R.A.M.C., Captain Sinclair Miller, M.B., R.A.M.C. (S.R.), Captain Thomas Mackinlay Miller, R.A.M.C. (S.R.), Captain John Murdoch, M.B., F.R.C.S., R.A.M.C. (T.F.), Temp. Captain George Ernest Neligan, M.B., F.R.C.S., R.A.M.C., Captain John Joseph O'Keefe, M.B., R.A.M.C., Captain William Calder Paton, M.B., I.M.S., Captain Gerard Petit, R.A.M.C., Temp. Captain Robert Cecil Robertson, M.B., R.A.M.C., Captain Henry Bowler Sherlock, R.A.M.C. (S.R.), Captain Sumner Hugh Smith, R.A.M.C., Captain Clifford William Sparks, R.A.M.C. (S.R.), Captain Owen William Dyne Steel, R.A.M.C. (T.F.), Captain Evelyn Alexander Sutton, R.A.M.C., Captain Fredk. Thomas Turner, R.A.M.C., Captain Quentin Vaughan Brooke Wallace, M.D., R.A.M.C. (S.R.), Temp. Captain John Richard Menzies Whigham, R.A.M.C., Captain Charles Albert Wood, M.B., I.M.S., Captain Thomas Wilson Wylie, M.B., R.A.M.C. (S.R.), Temp. Captain Robert Frew Young, M.B., R.A.M.C., Temp. Lieutenant Patrick Cagney, R.A.M.C., Temp. Lieutenant Harold Cane Godding, R.A.M.C., Temp. Lieutenant James Towers Kirkland, M.B., R.A.M.C., Temp. Lieutenant Richard Hugh McGillcuddy, R.A.M.C., Temp. Lieutenant Alfred Reginald Roche, R.A.M.C., Temporary Lieutenant Harold Arthur Rowell, R.A.M.C., Temp. Lieutenant Algernon Charles Stanley Smith, R.A.M.C., Temp. Lieutenant William Norman Watson, M.B. R.A.M.C., Temp. Lieutenant Archibald Francis Wright, M.B., R.A.M.C.

Australian Force.—Captain Joseph Espie Dods, Aus. A.M.C.

New Zealand Force.—Captain Robert Neil Guthrie, New Zealand A.M.C.

OBITUARY.

DR. T. W. BUTCHER, BLACKPOOL.

DR. T. W. BUTCHER, Blackpool, died at his residence on January 10th. Deceased, who was 49 years of age, was for some years police surgeon, and had taken an active part in various movements in the town. He was hon. surgeon to the Foxton Dispensary, president of the Blackpool Microscopical Society, and a former hon. secretary of the local Literary and Scientific Society. He was out of doors up to a few days before his death, but for some time had suffered from diabetes.

MEDICAL NEWS IN BRIEF.

Hospital Saturday Fund.

ACCOUNTS of the Hospital Saturday Fund (London) for 1915 were closed on the 10th inst. Notwithstanding the many appeals in connection with the war made to the public during the year, the income of the fund steadily progressed, with the result that the total reached £36,790 as compared with £30,130 for the previous year. Between December 28, 1915, and January 10, 1916, inclusive, the sum of £11,406 was forwarded to the head office.

The following figures show the fluctuations in contributions received and the benefits granted during the last three years:—

Contributions received—	1913.	1914.	1915.
General fund	£30,375	£30,130	£36,790
Distribution committee	8,244	8,701	7,899
Surgical appliance committee	1,728	1,743	1,961
Ambulance committee...	56	102	88
Totals	£40,403	£40,676	£46,738
Benefits granted	55,264	52,334	46,472

The splendid manner in which the Metropolitan hospitals have succoured our sick and wounded soldiers has touched the hearts and stirred the wills of all sections of the community, as evidenced by the remarkable increase in the incomes of the three large Metropolitan Hospital Funds for 1915.

Duchess and Red Cross Work.

THE Duchess of Connaught has accepted the Presidency of the Canadian Red Cross Association.

Health of the Troops.

MR. TENNANT referring to sickness and mortality among troops in the Salisbury Plain district, states that the annual ratios per 1,000 are, during the period September 1st to December 31st:—Admissions, 325.4; deaths, 1.88. Both these ratios are lower than those for peace time.

Medical Practitioners and the R.A.M.C.

IT is officially announced that the Army Council consider that no qualified medical practitioner who is willing to accept (if offered) a commission in the Royal Army Medical Corps should be accepted as an ordinary combatant. It is understood that the Central Medical War Committee will circularise the profession, stating that any medical practitioner who has enlisted under the group system should immediately enrol himself under the Committee's

scheme as willing to accept a commission in the Royal Army Medical Corps if offered him. To every practitioner who enrols the Committee issues a certificate of enrolment. Every medical practitioner who has attested and enrolled under the Central Medical War Committee's scheme should, when called up, produce to the recruiting officer his certificate of enrolment. He will then not be posted to a combatant unit, and will await instructions from the Central Medical War Committee.

New Hospital for Nervous Diseases.

A NEW military hospital for neurasthenic soldiers will be ready for occupation at the end of this month. It almost directly faces King's College (the Fourth London General Hospital), and has been taken over by the War Office from the London County Council. The Maudsley Hospital, as it is known, was built out of money left to found an institution for mental cases which were not suitable for asylum treatment. It is equipped on up-to-date lines, and, though it was originally planned to contain only 100 beds, the military authorities are providing equipment for 150, which will allow the treatment of about 600 patients a year. The hospital communicates directly with Grove Lane London County Council Schools, an annexe of King's College, now used also for patients suffering from neurasthenia.

Germany's Decreasing Births.

AT a recent meeting in Berlin of the society for the study of the population statistics, with the object of preventing the alarming decrease in the birth rate, Professor Wolff announced that the Russian people are increasing annually by from three to four millions, whereas the increase in Germany is only 800,000 per annum. It was therefore held to be of the greatest importance to find means by which to add to the population. The *Süddeutsche Monatshefte* strongly supporting this view says that 200 million Germans will be required to defend the Empire in the year 2000.

General Seely's Gift.

BROOKE HILL, Isle of Wight, the fine new residence built by the late Sir Charles Seely, has been placed at the disposal of the Royal Flying Corps by Brigadier-General J. E. B. Seely, M.P., to be used as an officers' convalescent home. It will be opened almost immediately.

Public Health Training.

COURSES of training for men and women for work in the public health service of the country have been arranged by the Royal Sanitary Institute, Buckingham Palace Road. The course for sanitary inspectors, which is open to women as well as men, begins on February 7th, and the course for health visitors on February 21st.

Serum at Fire Stations.

THE District Council of Edmonton proposes to use the fire brigade for public health work. The suggestion is to keep supplies of serum at the brigade station, so that when doctors are called to cases of diphtheria they can provide anti-toxin treatment without delay.

Curative Baths at Bournemouth.

AT the last meeting of the Bournemouth Town Council a letter from the Bournemouth Medical Society was read to the Health Committee, stating that the society had come to the decision that every effort should be made to promote Bournemouth as a definite health resort in order to compete as far as possible with other health resorts in this country in taking the place of those Continental spas and health resorts which, in consequence of the war, would be avoided by the people of this country. For this purpose the society had appealed to the medical practitioners of Bournemouth, Poole and Christchurch inviting them to join a general committee, and they asked the Council that such committee should be recognised by them as an advisory medical committee by whom suggestions could be made and to whom the Council could at any time apply for advice in all matters connected with the best means of furthering the object named. The Town Clerk was instructed to reply that the Council would be very pleased to co-operate with the proposed new committee in the direction indicated.

Relief for Hospitals.

IN the House of Commons on January 11th Sir P. Magnus asked the Chancellor of the Exchequer what steps he had taken to give effect to his promise to remove the duty on alcohol used for medical or surgical purposes in hospitals.

Mr. McKenna, in reply, stated that it was proposed that the relief should take the form of grants from public funds. A committee had been appointed to advise as to the basis of such grants.

National Memorial Hospital at Newport.

THE offer of Sir A. Garrod Thomas's house at Newport, Monmouth, for the purpose of a hospital for children suffering from tuberculosis was accepted at a conference of the medical side of the Welsh National Memorial Association at Cardiff. It was decided also to recommend that the gift of £1,000 by Messrs. Griffiths, of Newport and Cardiff, for fitting up the house, be accepted and the work proceeded with.

St. Bartholomew's Memorial Service.

THE memorial service held on January 13th for those members of the medical staff of St. Bartholomew's Hospital who have fallen in the war was attended by Lord Sandhurst, treasurer of the hospital and Lord Chamberlain to the King, who represented His Majesty; the medical staff, including Sir Lauder Brunton, and relatives of the dead.

Numbers of the Medical Profession.

WE have received from the President of the General Medical Council the following statement regarding the number of medical practitioners and medical students registered in 1915:—

Medical Practitioners Registered.

	In 1915.	Annual average during the five years 1910-1914.
England ...	863*	591
Scotland ...	412	384
Ireland ...	251	197
Total ...	1,526	1,172

*This number includes 269 practitioners with Colonial and foreign qualifications.

Medical Students Registered.

	In 1915.	Annual average during the five years 1910-1914.
England ...	754	620
Scotland ...	694	517
Ireland ...	470	304
Total ...	1,918	1,441

Antityphoid Inoculation in the Army.

ASKED whether it was intended to inoculate with antityphoid serum all or any men who might be compulsorily attested under the operation of the Military Service (No. 2) Bill, Mr. Tennant replied that he thought the men in question would be in the same position as men who undertake voluntary enlistment.

Poor Law Military Hospital Nurses.

OWING to protests from many Poor Law authorities, the War Office has cancelled its order restricting the pay of nurses in Poor Law war hospitals.

The War Office ordered that probationer nurses in war hospitals established in Poor Law buildings should be restricted to the rates of pay they were

receiving before the conversion of such buildings to military use.

The consequence of this was that the nurses were paid much less than those employed in other military hospitals.

The War Office has now cancelled the order as to the restriction of pay, and consequently nurses employed in Poor Law military hospitals will be permitted to receive the same rates of pay as prevail elsewhere.

Military Service of Medical Students.

THE President of the General Medical Council has received from the War Office the following intimations relating to medical students :—

I. Students who at or before the close of the present winter session will be qualified for entry to one of the examinations for third-year students in medicine, and duly enter for the examination for which they are studying, will not be attested until after its conclusion; and if they are successful will be included in the class of fourth-year students (under Lord Derby's scheme).

II. Directions have been sent to all commands in England and Scotland, instructing them to inform military representatives [on recruiting tribunals] that in cases where students, attested in Army Reserve, Section B. appeal for their calling-up to be postponed until after they have taken an examination, this request may be granted provided the examination will be held before March 31st, 1916.

The President will be grateful if steps are taken by the authorities of each medical school to call attention to these official intimations, which have special reference to students of the first, second and third years of the professional course.

Conjoint Examinations in Ireland.

THE following candidates have passed the 1915 examination by the Royal College of Physicians and the Royal College of Surgeons :—

Preliminary Examination.—Isaac W. Arnovitch, Lucretia H. H. Byrne, Anthony B. Clery, William E. Colahan, Robert M. Corbet, John J. Clune, Thomas E. Donovan, Anthony B. Doyle, Thomas C. Doyle, Anthony C. Esmonde, M. W. Fraser, Roberta E. Fisher, William A. Graham, Sidney G. Gilmore, Thomas M. Goldon, Thomas Heffernan, John Hewitt, Margaret Holliday, Patrick Killeen, J. J. A. Lord-Flood, Thomas J. McCormack, Alexander McLean, Henry T. Macaulay, Abraham Martinson, Patrick Moylan, Robert J. Ogden, Patrick J. A. O'Connor, Thomas L. Quinn, Joseph Rubenstein, George E. Strahan, John Sheil, Richard T. Taylor, Mary E. Tempest, John W. Tighe, H. E. W. Watts Waters.

Second Professional Examination.—Miss H. G. Rea (with honours), S. H. Berwitz, J. P. Brennan, J. A. Cunningham, P. J. Filose, S. A. Gailey, Miss E. Gleeson, W. J. McElhinney, P. J. McGing, C. Murray, M. C. Myerson, J. C. Rutherford, R. T. Stoney.

Third Professional Examination.—Miss E. Budd, D. L. Crowe, I. B. Culhane, F. Daly. E. H. H. Lloyd-Dodd, J. P. Doyle, P. J. Flood, H. Hurst, D. C. Kelleher, J. E. Lucas, T. P. McDonald, E. T. McElligott, M. F. Murphy, M. M. Price, G. W. Pope, G. C. F. Roe.

Supplemental Final Examination.—Jack Cohen, John Dwyer, Thomas Farrell, Owen J. M. Kerrigan, John F. Saunders Magner, Thomas J. Ryan, John J. Walshe, Patrick W. Walshe.

Final Examination.—Michael Burke, Lawrence L. Davys, Maurice de Caestecker, John A. Fretton, Daniel L. Kelly, Thomas F. Moran, Vincent A. Power, James Ryan, Cecil W. C. Robinson.

The Royal College of Surgeons in Ireland.

THE following candidates have passed :—

First Dental Examination.—Michael J. Bannigan, Peter P. Hogan, Matthew J. Hunt, Charles A. McGlade, Stephen J. Morrogh, Richard Walters.

Final Dental Examination.—Peter E. F. Dunn, George V. Hartigan, Charles S. Hillis, Montague R. Mosbery, John F. O'Sullivan, James P. Timony, Patrick J. Slattery.

Primary Fellowship Examination.—William E. Cooke, Sylvester J. Healy.

Final Fellowship Examination.—Lieut. Thomas Dowzer, R.A.M.C., Capt. John G. J. Green, R.A.M.C.

Licence in Surgery Examination.—Myles Keogh.

Society of Apothecaries of London.

THE following candidates having passed the necessary examinations in December, were granted the L.S.A. Diploma of the Society, entitling them to practise Medicine, Surgery and Midwifery:—A. Z. Abushady, R. N. Craig, W. Fox, I. H. Pearse, and E. E. Samaraweera.

MEDICAL WAR ITEMS.

CAPT. CYRIL ARMAND BERNARD, Royal Army Medical Corps, attached to 4th York and Lancaster Regiment (T.F.), wounded in the North of France, practised, before going on active service, in Rodney Street, Liverpool, and is an L.R.C.P. and L.R.C.S.Edin.

LIEUTENANT M. A. SWAN, R.A.M.C., attached R.F.A., who has been wounded, graduated M.B., Ch.B., in Edinburgh, in 1903, after which he was house surgeon and physician at Paisley Infirmary. Prior to joining the R.A.M.C. last February he was in practice in South Shields.

LIEUTENANT WILLIAM WILKIE DEANS, Royal Army Medical Corps, who died of wounds received whilst serving with the Mediterranean Force, was an L.R.C.P. and L.R.C.S. of Edinburgh, and also since 1901 a Licentiate of the Royal Faculty of Physicians and Surgeons, Glasgow.

Capt. William Ernest Rielly, Royal Army Medical Corps, who died whilst serving at the Dardanelles, was attached to the 3rd City of London Regiment. He resided at Barnes, and was formerly House Physician at the Brompton Consumption Hospital. Captain Rielly obtained the joint M.R.C.S. and L.R.C.P.Lond. qualifications in 1891, and three years later took the M.B. degree at Durham and the Diploma in Public Health at Cambridge.

SURGEON CHARLES FRANK SCHULER, R.N., Hawke Battalion, who has been wounded at the Dardanelles, was in practice at West Norwood before volunteering for active service with the Navy. Educated at St. Thomas's Medical School, he was formerly Clinical Assistant to the children's department and House Surgeon at St. Thomas's Hospital, and House Physician to the Evelina Hospital for Children. He became M.R.C.S. and L.R.C.P.Lond. in 1910.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad.

Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada. For South Africa, The Record Publishing Co., Cape Town. Messrs. Geo. Robertson and Co., of Sydney and Melbourne, are our special agents for Australia.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

"SPOONERISMS."

ACCORDING to the "Gazette" of the 3rd General Hospital, there has lately been an astonishing revival of "spoonerisms." It quotes a doctor who began by calling his audience tons

of soil, next informed them that the first thing they must learn was to shout and scoot, and wound up by promising his hearers that on their return in triumph all the hags would be flung out to welcome them.

SOLON (Clifton).—The report of the Medical Officer of Health for Bristol shows that during the week ending January 8th, 151 births and 100 deaths were registered, corresponding to annual birth and death rates of 21.6 and 14.3 respectively. The death rate for the corresponding week of last year was 20.2, and the ten years' average was 16.1.

BANDON (Salisbury).—We do not favour an immediate inquiry.

CARPENTER AND JOINER.

A DOCTOR, giving evidence at Clerkenwell county court, said that in his younger days he was apprenticed as a carpenter. The correspondent who sends us this cutting states that the medico still executes repairs, of a professional kind.

REBOUND (Leith).—In last week's issue we gave prominence to the gentleman's utterance.

A DR. GRACE BAT.

A CRICKET bat autographed by Dr. W. G. Grace and used by him in 1912 was sold three times in one day at a sale for the Red Cross and the Allies' Agricultural Relief Fund held in Montreal Park (the seat of Lord Amherst), realising £35 14s.

LOTUS (Sandown).—Sinapis has referred to the subject on more than one occasion.

FELIX (Bath).—It is estimated that more than 2,000,000 women and girls have come into the labour market since the beginning of the war.

THE LATEST RECRUITING POSTER.

A GOOD remedy to stop your hat from blowing off on windy days is to wear a khaki cap.

PAGODA (York).—Queen Alexandra has given £25, her annual subscription, to the Chelsea Hospital for Women.

WASTAGE IN THE ARMY.

MR. TENNANT states that the wastage in the infantry is estimated by the military authorities at 15 per cent. per month.

A LANCE-CORPORAL of the Buffs, who had lain dumb in hospital in Boulogne for six weeks, recovered his power of speech on being visited unexpectedly by his mother.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, JANUARY 19TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF THE HISTORY OF MEDICINE) (1 Wimpole Street, W.).—5 p.m.: Dr. Arnold Chaplin: Mortality in the British Army 100 Years Ago. Dr. H. Selfe Bennett: Joshua Ward. Books, MSS., etc., are on view at 4.30 p.m.

THURSDAY, JANUARY 20TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF DERMATOLOGY) (1 Wimpole Street, W.).—5 p.m.: Mr. J. E. R. McDonagh and Dr. H. Spence: Cases of Syphilis treated by "Intramine." Dr. Parkes Weber: Kaposi's so-called "Idiopathic Multiple Pigment Sarcoma"—a Case described in 1905, showing Improvement. Dr. J. H. Sequeira: Sclerodermia with Graves's Disease. Exhibition of Cases (at 4.30 p.m.).

ROYAL SOCIETY OF MEDICINE (SECTION OF BALNEOLOGY AND CLIMATOLOGY) (1 Wimpole Street, W.).—5.30 p.m.: Paper: Dr. J. Campbell McClure: Hydrological Treatment of Gastro-intestinal Stasis. (At 7 p.m. the members will dine together at Pagani's Restaurant, Great Portland Street, W., and members may bring guests. Members who wish to dine are requested to send their names to Dr. J. Campbell McClure, 59 Harley Street, W.)

CENTRAL MIDWIVES BOARD (Caxton House, Westminster).—Meeting.

FRIDAY, JANUARY 21ST.

ROYAL SOCIETY OF MEDICINE (SECTION OF ELECTRO-THERAPEUTICS) (1 Wimpole Street, W.).—8.30 p.m.: Demonstration: Sir James Mackenzie Davidson will demonstrate a "Commutator Break" for Utilising the Current at "Make" as well as the Current at "Break." Paper: Dr. E. P. Cumberbatch: The Use of the "Simpson Light," with a Description of the Apparatus. Dr. Russ will give an Account of the Physical Properties of the Light. The Apparatus for the production of the Light will be shown. A Localising Couch designed by Sir James Mackenzie Davidson will be on view.

SOCIETY OF TROPICAL MEDICINE AND HYGIENE (11 Chandos Street, Cavendish Square, W.).—5.30 p.m.: Paper: Dr. W. J. Penfold: The Ætiology of Typhus.

CENTRAL MIDWIVES BOARD (Caxton House, Westminster).—11 a.m.: A Special (penal) Meeting.

MONDAY, JANUARY 24TH.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Discussion on Gunshot Wounds of the Chest (introduced by Colonel Sir J. R. Bradford, A.M.S., Captain H. Henry, R.A.M.C., and Captain M. Davies, R.A.M.C. (T.). Lieutenant-Colonel W. H. White, R.A.M.C. (T.), Dr. S. West, Dr. M. Leslie, and others will take part in the discussion.

THE ROYAL SOCIETY OF MEDICINE (SECTION OF ODONTOLOGY), 8 p.m.: Paper:—Mr. W. Courtney Lyne (communicated by Mr. Montagu F. Hopson): The Significance of the Radiographs of the Piltdown Teeth. Professor Arthur Keith, Professor A. S. Underwood and Dr. Smith Woodward will take part in the discussion. Casual Communication:—Mr. Rushton: Total Absence from Deciduous and Permanent Dentition.

TUESDAY, JANUARY 25TH.

THE ROYAL SOCIETY OF MEDICINE (SECTION OF PSYCHIATRY), 8.30 p.m.: War Discussion:—A special discussion on The Functional Neuroses without Visible Sign of Injury Caused by Shell Fire, will be opened by Dr. Mott, F.R.S., and will be adjourned to the meeting of neurology on Thursday, January 27th. N.B.—Members of other Sections interested in the subject are specially invited to be present.

Vacancies.

Birkenhead Borough Hospital.—Junior House Surgeon. Salary £180 per annum, with board and laundry. Applications to the Secretary.

Bridgwater Hospital.—House Surgeon. Salary £125 per annum, with board, lodging, and washing. Applications to the Honorary Secretary, Edward Trevor, Bank Chambers, Bridgwater.

Bury Infirmary.—Senior House Surgeon. Salary £250 per annum, with board, residence, and washing. Applications to the Honorary Secretary, Infirmary, Bury, Lancs.

Chesterfield and North Derbyshire Hospital.—Second House Surgeon. Salary £150 per annum, with board, apartments, and laundry. Applications to the Secretary.

County Asylum, Chester.—Junior Assistant Medical Officer. Salary £200 per annum, together with a war bonus of £50, with board, lodging and washing. Applications to G. Hamilton Grills, M.D., Medical Superintendent.

Derbyshire Royal Infirmary, Derby.—House Physician and Casualty Officer. Salary £200 per annum, with board, residence, etc. Applications to E. Forster, Secretary.

Hulme Dispensary, Dale Street, Stretford Road, Manchester.—House Surgeon. Salary £250 per annum, with apartments, attendance, coal, and gas. Applications to Honorary Medical Secretary.

New Hospital for Women, Euston Road, N.W.—Pathologist. Salary £125 per annum. Applications to the Secretary.

North Ormesby Hospital, Middlesbrough.—House Surgeon. Salary £150 per annum, with board, residence and laundry. Applications to Arthur Williams, Secretary.

Parish of Dunrossness.—Medical Officer and Vaccinator. Particulars of the appointment to be had from the subscriber. Applications to G. W. Jamieson, Clerk, Cunningsburgh, Shetland.

The Victoria Hospital for Children, Tite Street, Chelsea, S.W. Senior Resident Medical Officer. Salary £250 per annum, with board, lodging, and washing. Applications to the Secretary.

Warneford General Hospital, Leamington Spa.—Resident Medical Officer. Salary £150 per annum, with residence, etc. Applications to Fred Smith, House Governor.

Appointments.

GRAVES, A. J., M.R.C.S., L.R.C.P., Certifying Factory Surgeon for the Cleator District, co. Cumberland.

GROVES, T. C., M.B., B.S.Lond., Medical Superintendent of the Hereford County and City Asylum, vice Dr. Morrison, deceased.

PEACHELL, G. E., M.B., B.S.Lond., Medical Superintendent of the Dorset County Asylum, Dorchester.

WEBBER, W. W., L.R.C.P.Edin., M.R.C.S., Certifying Factory Surgeon for the Crewkerne District, co. Somerset.

Births.

LAIRD.—On January 10th, at Peshawar, India, the wife of Captain W. Balfour Laird, Staff Surgeon, R.A.M.C., of a daughter.

MACKINNON.—On January 9th, at Nairobi, British East Africa, the wife of Murdoch Mackinnon, M.D., D.P.H., of a daughter.

PENNY.—On January 7th, to the wife of Captain C. H. Greville Penny, R.A.M.C., at Glenfield, Green Island—a daughter.

REYNOLDS.—On January 3rd, at Shameen, Canton, China, the wife of W. Graham Reynolds, M.R.C.S., L.R.C.P.—a son.

TROUP.—On January 9th, at Hawkwell Place, Pembury, the wife of Captain W. Annandale Troup, M.B., R.A.M.C., of a son.

WALKER.—On January 10th, at the Red House, Uxbridge, to Dr. and Mrs. Walker—a son.

Marriages.

BARFETT—HANCOCK.—On January 11th, at Christ Church, Surbiton, Rev. J. C. F. Barfett, Vicar of Halestown, Cornwall, to Mary Deborah Hancock, M.A. (T.C.D.), L.R.C.S.Edin., L.F.P.S.Glasgow, daughter of Mr. and Mrs. E. H. Hancock, Alfriston, Surbiton.

GRIFFITH—GULSTON.—On January 11th, at Adel, Leeds, by the Rev. W. H. Draper, Lieut. David W. Griffith, R.A.M.C. (T.F.), of Raglan, Mon., to Grace, eldest daughter of F. W. K. Gulston, of Kuling, China.

SINCLAIR—SOUTER.—On January 8th, at Forres, N.B., Neil Frederick Sinclair, M.R.C.S., L.R.C.P., eldest son of Dr. and Mrs. Sinclair, Jamaica, to Chrissie Stewart, second daughter of Mr. and Mrs. J. F. Souter, Roseville, Forres.

Deaths.

BALE.—On January 12th, at Heathbank, Stockport, William Barker Bale, M.R.C.S., L.R.C.P., second son of the late William Bale, J.P., M.R.C.S., L.R.C.P., of Heaton Norris, aged 49 years.

BOAM.—On January 10th, at his residence, 77 Great Brook Street, Birmingham, Herbert Boam, M.R.C.S.Eng., L.R.C.P.Lond.

WILLIAMS.—On Sunday, January 16th, at his residence, William Street, Greenwich, Herbert Williams, M.D.Lond., D.P.H.Camb., Port Sanitary Officer for London. Aged 53.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, JANUARY 26, 1916. No. 4.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."— BEAUMARCHAIS.

The Kaiser's Malady.

FROM the vehemence of the official protestations to the effect that the Kaiser has been suffering merely from a harmless furunculosis, it is to be supposed that something really is wrong. I have heard it said that the affection of the larynx was tuberculosis and not cancer; but it is obvious that this is a mere guess. What is certain is that William II. would have fulfilled his promise to read the speech from the throne had he not been medically prevented from so doing; it is also certain that a furunculosis would not have been a sufficient reason for such a prohibition, and that an affection of the larynx would. Moreover, the walks in the garden and the excursions "to the front," which have been so much insisted upon, are quite as much in keeping with tubercle or carcinoma as they are with furunculosis. In the case of either cancer or tubercle the prognosis is necessarily grave. At his age and with his heredity, cancer is by far the more likely of the two, but tubercle is by no means unlikely.

Green Yule.

THE popular saying that a green Yule-tide makes a full churchyard has, owing to the mild weather we have enjoyed, been much quoted recently. Such scientific support as may be given to the saying arises from the fact that frost is a germ destroyer. This factor is, however, probably more than counterbalanced by the opportunity given to germs by the hermetically sealed windows which hard weather brings in its train. Extremes of temperature are very trying to old people and delicate children. This is common knowledge of which ample confirmation may be found in the obituary columns during a spell of really cold weather. The old-fashioned Christmas weather may be very artistic; for the vigorous it is very agreeable, especially in the country; but for the old and feeble it not infrequently supplies the final straw.

Zone-therapy.

ONE looks to the "Strand Magazine" for various delights—was it not from those pages that Sherlock Holmes thrilled and enthralled a whole generation?—but I have not hitherto thought of it as a medical contemporary. And yet the current number forces me so to regard it. Dr. Edwin F. Bowers has contributed to this number an article on the subject of Zone-Therapy, which is the name given to a method of relieving and providing against pain, discovered and practised by Dr. William H. Fitzgerald, of Hartford, Connecticut. The name given to the article, "Squeeze Your Toe and Stop the Toothache," is characteristically Yankee, but unless the substance is much more than usually Yankee and yellow, it is well worthy of the attention of broad-minded men. Dr. Fitzgerald, it seems, occupies a position in his own country which commands respect. He is a graduate of the University of Vermont; he was for two years clinical assistant at the Central London Ear, Throat and Nose Hospital, and for another two years he acted as assistant to Professor Politzer in Vienna. He is now the senior surgeon to the Throat and Nose Department of St. Francis Hospital in Hartford.

Pressure as Analgesic.

"ACCIDENT disclosed that pressure on a certain spot in the nostril gave practically the same result as the use of cocaine. That was six years ago. He began experimenting, and he found there were many spots in the nose, mouth, throat and on the tongue which, when pressed firmly, deadened certain areas to all sensation. He began using nerve-pressure instead of local anæsthetics in his operations, and now he rarely has any use for cocaine." There is nothing in this which makes any undue claims upon our credulity; it may indeed be said to coincide with much that is already known on the subject. It is the subsequent development which, to many of us, must, to use another Yankee expression, appear rather "tall."

Zones.

THE body is divided by Dr. Fitzgerald into ten more or less perpendicular zones, which zones correspond to the fingers or the toes on the same side of the body. Successfully to employ the method you must know your zones; which finger or toe to press, and whether that finger or toe is to be pressed antero-posteriorly or laterally. "If the first joint of the thumb is pressed firmly and steadily for three minutes it will relieve and favourably influence

pain in the stomach, the chest, the front teeth, the nose, the great toe, as well as everything else in this zone. But it will have not the slightest influence upon the tonsils, the liver, or the spleen, for they are in the fourth zone, and to affect them it is necessary to make pressure upon the fourth finger. Furthermore, pressure on the right hand will not have any effect on the left half of the body."

Zones and Dentistry.

DENTISTS are said to be less hide-bound than physicians, and while the latter have been engaged in scoffing at Dr. Fitzgerald the former have been giving his methods a trial. Herein the dentists are obviously right; for even if the methods do no good, they are obviously innocent of harm. "Many dental operators prefer to make pressure with thumb and finger over the root of the tooth operated upon. If this seems ridiculous to you, try it some time when you have an aching tooth. Start gently, increasing the pressure, and holding steadily for three minutes. Maybe your thumb and finger will ache more than the tooth. If the nerve is not exposed and there is no abscess at the root of the tooth, this pressure will stop the aching every time." Unless the whole article is an audacious piece of de Rougemontism, which it does not seem to be, the matter is well worthy of careful attention and serious investigation.

Dr. Guy Hinsdale.

THE many friends in this country of Dr. Guy Hinsdale, of Hot Springs, Virginia (he is a Fellow of the Royal Society of Medicine), will be pleased to see that he has shared with Dr. Adolphus Knopf, of New York City, the prize of 1,500 dollars offered by the Smithsonian Institution for the best treatise on "The Relation of Atmospheric Air to Tuberculosis." Dr. Hinsdale's treatise, which runs to 136 pages, is a most exhaustive, painstaking and scholarly production. It is published in Vol. XXX (1914) of the Transactions of the American Climatological and Clinical Association. The object of the Association is the clinical study of disease, especially of the respiratory and circulatory organs and of climatology and hydrology; certainly no more masterly contribution to the whole field of these studies could be produced than this well-written, well-illustrated, and scientifically-conceived treatise of Dr. Hinsdale's. It is a work which no one who is interested in the latter-day treatment of tuberculosis can afford to be without.

Science and Education.

WRITING to the *Times* a short time ago, Sir Ray Lankester deplored the neglect of science in our system of education. As a contribution to this question, Dr. C. A. Mercier wrote a letter, which appeared on the 17th inst., in which he says:—"One subject that Sir Ray Lankester relegates to an insignificant position I should place in the forefront of education. I refer to the knowledge and use of the mother tongue. Clear thinking cannot be attained without accuracy in the use of language—of language as an instrument of thinking and a means of expression; and exercise in clearness and accuracy of expression is itself exercise in clearness and accuracy of thinking. The neglect of this subject in our system of education is gross and unpardonable, and its disastrous effects are seen everywhere. Parliamentary draughtsmen, who should be the experts of experts in the matter, are a byword of incompetency. Politicians and philosophers are obscure of set purpose, but so low is the standard of clearness of expression that their utterances are allowed to pass without exposure. Writers and speakers of every class vie with one another in the use of language that is obscure, confused, ambiguous, and illogical, besides being often unidiomatic and un-English. It is not for its want of grace and elegance that I deprecate this practice; it is because the confusion and obscurity of the language faithfully reflect the confusion and obscurity of the thought."

Clearness and Elegance.

THIS is a question on which anyone who has had anything to do with editing a paper, and—must I say it?—especially a medical paper, will cordially endorse Dr. Mercier's strictures. The standard of clearness of expression in medical literature is deplorably low; and in saying this I am, with Dr. Mercier, distinguishing between clearness and elegance. Clearness is a duty which few take the trouble to perform; it can be, and ought to be, acquired by everyone who has anything to say which is worth saying. Elegance is a gift which is not possessed by many writers, lay or medical. With the exception of Dr. Mercier himself, Mr. Stephen Paget, Sir Clifford Allbutt, Sir William Osler, and Dr. Leonard Guthrie, the ranks of the profession cannot be said to hold more than one or two in whom literary grace is at all conspicuous. I first made Dr. Mercier's acquaintance as an author when about ten years ago I first read his article on "Vice, Crime and Insanity" in the 1st edition of "Allbutt's System of Medicine," Vol. VIII., which I have ever since regarded as a model of what such writing should be.

The late Lord Salisbury.

IT is many years since I heard the late Lord Salisbury, who was himself an exponent of elegance, both in the spoken word and the written, oppose the abolition of English as a subject in the competitive examinations for Sandhurst. I do not now recall the reasons which were advanced for the abolition which was proposed, and, despite Lord Salisbury's opposition, ultimately carried, but I well remember the picture which "the master of flouts and gibes and sneers," as Disraeli called him, drew of the probable results of the measure. One was that it would lower the standard of English not only among cadets, but in all classes of the educated community, because the subjects demanded by the Civil Service Commissioners would be cultivated in the schools and those not demanded would be neglected. To judge by the standard of English in current medical literature, this forecast has been abundantly justified in the event.

A Busy-Scottie-Body.

IT is said that the same famous statesman was fond of advising people, sometimes very emphatically, to mind their own business. If this advice were more frequently acted upon, doctors would be spared a great deal of the irritation provoked by the unwarrantable interference of laymen, and especially of laywomen, in matters purely professional. A good example of the kind of busy-bodyism to which we are so often subjected by effusive hearts and muddle-heads was afforded by the action which Dr. J. G. Wallace-James, of Haddington, brought against Mrs. Georgina Fergusson or Baird, of Coulston, Haddington, for an alleged slander contained in a letter written by the lady to the Chairman of the Haddington Parish Council, representing that Dr. Wallace-James had been guilty of gross and wilful failure of professional duty in omitting to procure the services of the district nurse to a patient. The *Glasgow Herald* reports that "his Lordship considered that the lady was not warranted, without making further inquiry, to jump to the conclusion that the patient was entitled to the doctor's services in his capacity as medical officer. Her motive, as it appeared to his Lordship, was of the best. Her sole concern was for the welfare of the sick poor. She had no desire whatever to injure the pursuer's personal reputation, and so far as his Lordship could judge, she believed she had adequate information on which to base her charge. But she had not." Could there possibly be a better example of the truth of the saying that more harm is done by want of head than want of heart?

Recruiting Again.

FROM a letter which appeared in *The Times* on January 18th, signed "Surgeon" (I wish he had signed his name), it is evident that the evils which I have so often referred to in connection with enrolling the unfit are to be very much intensified under the order which has recently been issued. "Within the last few days the instructions have been altered, and the procedure now authorised is as follows:—Every recruit is first to be seen and the oath of allegiance administered by the recruiting officer, who decides whether he shall be medically examined or not, and if examined, whether found fit or not by the medical officers, he is to be paid his 2s. 9d. and receive an armlet. The result is that, although the new regulations have been in operation but a few days, in one recruiting office, with only a moderate number of applicants for enlistment, several cases of feeble intellect, epilepsy, stiff joints, and other conditions rendering them absolutely useless in the Army have been sworn in as soldiers and received their money and armlet. Such men must, necessarily, be a source of ridicule or pity to their friends and relations who know their condition, and it is a scandalous waste of public money to pay such cases (not a very small percentage either of the total enlistment), as they must obviously be rejected when brought up for their second medical examination in their groups. If the only object is to get numbers, surely the easier and quite as effective plan would be to distribute the money and armlets broadcast without any inquiries or examination whatever in the first instance, but it is obviously unfair that a person physically or mentally unfit for military service should be put through the ordeal of enlistment at an expense to the public, without the slightest prospect of his services being of any use to his country."

The Doctor's Bill.

THE question was bound to crop up soon after the New Year, and here it is! The doctor's bill, always a *bête noir*, is necessarily a heavier burden than usual in these troublous times, and several people have been moved to write protesting letters to various papers. One writes to the *Bulletin* as follows:—"The doctor's bill has just come in, and I observe with horror that there is no reduction in this year of want." The doctor also mayhap observes with horror that there is no reduction in his rent, very little in his rates, and a serious increase in his petrol, his coal and his foodstuffs. It also may happen that what little leisure he can snatch he is gratuitously devoting to the public service by helping at a hospital, giving lectures to nurses, and doing the club work of a friend absent on military duty. Patients are too apt to imagine that a doctor, being a gentleman, is possessed of private means, and in bad times can as easily reduce his fees as a great landlord can reduce his rents. The real fact is that bad times hit a doctor more severely than most, for more than half the money he earns he cannot touch, and many of his debts are hopelessly bad.

It would be difficult to find a more flagrant example of abominable treatment of a doctor in the matter of fees than that which was disclosed in an action brought by Dr. H. A. Mason, of Duffield, against a Mrs. C. A. Scott, of Eastbourne, for the fees which the lady had verbally guaranted to pay in respect of attendance upon her deceased mother. As the undertaking was not in writing, the liability was repudiated.

"His Honour said he came reluctantly to the conclusion that defendant must succeed. That was not a court of morality or ethics, and he was not there to express views as to the propriety of the conduct of the defendant and her husband; but being human, he wished he could strain the law so as to make them responsible for what in his opinion morally they undertook to do. He should have thought that any affectionate daughter would be ashamed not to undertake that responsibility, more especially in this case as she was in a good position and her mother was ill able to afford the payment. There was no liability on defendant's part, however, and he accordingly gave judgment for her, though he made not order as to costs." Comment is superfluous.

Mr. Barker Better

THE following gem, which recently appeared in the *Daily Sketch*, is sent to me by a correspondent for my views. On the subject of Mr. Barker I have no views, for I know very little about him. He appears to have a good many friends in the Press, one of whom seems to be a very indifferent journalist. To confuse the

General Medical Council with the British Medical Association is like confusing the High Court of Parliament with the Court of Aldermen, and to suggest that the General Medical Council, a judical body, is a trade union is to display the crass ignorance of the bumptious penny-a-liner.

"Mr. H. A. Barker, the famous bone-setter, has been rather seriously ill, but is now better, and I make no bones about being exceedingly pleased at his recovery. For Mr. Barker is a valuable member of the community. I won't call his cures miraculous, because the word savours of quackery, and it is against such an accusation that Mr. Barker has for years had to wage an uphill fight. He has been, and still is, up against the stiffest and most jealous trade union in the world—the British Medical Council. The B.M.C. some time ago strafed utterly, and cursed with bell, book and candle a certain doctor who was associated with Mr. Barker in his work of healing. This association, you may remember, they termed 'infamous conduct.'"

Talked to Death.

IT is stated that not less than 24 patients died in a Chicago Hospital on Christmas Day, and that the Medical Superintendent gave it as his opinion that they were all talked into their coffins. "There were about four thousand visitors during the day, and the Superintendent's view was that the unfortunate patients could not stand the interminable chatter." There is probably a great deal of truth in this view, and I have often thought that the restrictions as to visitors should be more severe than they are. A really sick man's own friends, realising his condition, may be considerate, but it is impossible to prevent another man's friends from being jubilant and relatively noisy over his convalescence. Many are the complaints of the wounded soldiers over the boredom inflicted upon them by the pious well-meaning visitor. The crowning mercy is when she leaves a tract behind her.

SINAPIS.

CURRENT TOPICS.

The Lowering of Moral Standards.

THE sudden shifting of our ethical standards, as shown by the systematic training of men for mutual slaughter, is likely to have serious consequences when the war is over and the combatants return to civil life. Just as for many years to come we shall have thousands of mutilated men in our midst to lower the standard of national efficiency, so we must be prepared for a definite lowering of the moral standards which control us under normal conditions of existence. We cannot systematically encourage human beings to shoot, stab and blow up their fellow beings without vitiating their moral outlook on social relations. For reasons which we cannot hope to fathom, Nature inflicts this indignity upon us and destroys ethical conventions which it has taken centuries to consolidate. The primitive man tears off his mask and once again indulges his sanguinary and destructive instincts. And, worst of all, none can evade the obligation, since our very existence as a nation is dependent on our throwing all such considerations to the winds. What a change of front, to be sure! But yesterday we were moved to anger by a display of brutality on the part of a costermonger towards his donkey; to-day we applaud the blowing up of a vessel with its precious freight as an accomplishment calling for meritorious recognition of the perpetrators. Nature seems to take a malicious pleasure in keeping us in our places. We are born under conditions which will not bear thinking of, and death, as de Morny is said to have remarked, is "a disgusting exhibition." We try to educate ourselves into the belief that we are fundamentally superior to the animals by virtue of our altruistic conceptions, and then, all of a sudden, we devote our whole attention and ingenuity to making mincemeat of other human beings. We can no more alter this state of things than we can change the phenomena of childbirth and death. We must sacrifice our ideals or perish, so our ideals have to be ruthlessly trampled under foot. We cannot but pity the ministers of religion who are called upon to conciliate the fundamental doctrine of Christianity—that of non-retaliation—with the imperious call to arms, who have to preach a religion of peace and good will to men, and to inculcate upon their flock the supreme necessity for going to the front, there to revel in gore and thereby to gain the esteem of their fellow Christians. We shall be told, of course, that the soldier does not "revel in gore" any more than the surgeon who calmly amputates a damaged limb, that what we respect and admire in the soldier is not so much his ardour to kill as his willingness to sacrifice his life on behalf of his country, but these are mere sophisms which cannot satisfy the sage, though they may assuage the qualms of the unlettered. The war into which we have been plunged shows up irrefragably the emptiness of our social conventions, it affords convincing proof that the primitive man, who is lying somnolent within us, is ready and willing to spring to life and to issue forth, booted and spurred, into the sunshine, there to accomplish once again the deeds that have been his from the time of his inception. Let who can explain and reconcile these moral and physical anomalies of human life, which seem to confirm Shakespeare's lines that life

"is a tale told by an idiot,
Full of sound and fury, signifying nothing."

Second Best.

THE organisation of the medical services of the Crown in the present war has been, on the whole, so good and so successful in its results that one is naturally loth to criticise matters of detail. Moreover, criticisms, whether just or not, are likely to be met with the complacent answer that never were things so well managed as at present. Nevertheless, we feel obliged to return to a point we have previously raised—the substitution of untrained women for trained nurses in the hospital service of the Army. We have no desire to cavil at the patriotic spirit animating the thousands of earnest amateurs who have importuned the authorities with requests to be

made use of. It is right that they should be made use of, but it is as foolish to send them straight to responsible nursing duties as it would be to send the raw recruit straight to the trenches. There are large numbers of trained nurses available for army work, but no serious attempt has been made to bring them into the service: the offers of many have been treated with a bare acknowledgment. There are thousands of probationers with one or two years' hospital experience, but not one of them, as far as we can learn, has been employed in army work. Until these two classes were exhausted, not a single voluntary aider, however patriotic and high-spirited, and however well connected, should have been entrusted with nursing work. We are slow to accept the current rumour that voluntary work has displaced professional because it is cheaper. Our soldiers are entitled to the best, not the second best.

Medical Recruiting in Ireland.

We note that His Excellency the Lord Lieutenant, who is Director-General of Recruiting in Ireland, has sanctioned the recognition of the Irish Medical War Committee as the official channel of recruiting for the medical profession in Ireland. This Committee was formed last summer at a meeting of the medical profession held in Dublin, and is, we believe, thoroughly representative, and responsible. Most of the *personnel* of the Committee is made up of representatives of the several universities and teaching bodies. These gentlemen are naturally in a position to influence the men whom the medical services of the country most require—that is to say, the young men recently qualified—though, indeed, so far no persuasion has been required to bring these young men into the service. To the representatives of the licensing bodies have been added representatives of the Local Government Board and certain other medical men holding positions of influence. The Local Government Board has exerted itself to the full limit of its powers in assisting members of the Poor-law medical service to obtain leave in order to accept commissions. The Committee as a whole will endeavour not only to gain recruits for the national medical services, but to facilitate those who wish to join in making suitable arrangements for the care of their practices.

Hospital Recreations.

Provision of suitable amusement for the convalescent in hospital has possibly not received due attention. Nevertheless, vacant hours spent at the ward fireside during inclement weather, or occupied by monotonous constitutionals in the grounds, if they exist, do not distract the patient sufficiently, and tend to produce *ennui* and to aggravate depression. Literature, it is true, is sufficient enjoyment for some, but many patients of the class which frequents charitable hospitals are not addicted to reading, and require something further. Where grounds of any extent surround the hospital, a few games of a light nature would be a distinct benefit, both as improving the health and causing self-forgetfulness. As regards indoor amusement, the ideal to aim at would be some large spare room or ward, which might be employed as a recreation hall, but even in the absence of such utopian circumstances, much more frolic might be allowed in the general wards than at present, provided that it was confined to certain fixed hours. Children, as a rule are well catered for, but we think there is a tendency to overlook this matter where adults are concerned. It is a mistake to do so, inasmuch as the mutual self-obsession which develops where the sick are congregated militates against recovery to an extent which to the casual observer might seem hardly credible.

The Operating Theatre.

The disadvantages of the operating theatre as such, with its single, or at most double, tables, its relatively large size, and unwieldy auditorium, are fast becoming apparent. The initial expense of such a structure is extremely heavy, the cost of heating is great, and it requires for its efficient running a number of trained nurses, constituting a drain upon the resources of the domestic staff. Inasmuch as it is usually the one available place for surgery in the institution, cases pass through the surgeons' hands at a rate which is too slow to be desirable, both in the interest of patients and hospital alike. Moreover, with our present views upon the subject of asepsis, a large audience, even at a distance, is not to be commended. Upon the other hand, if we substitute for such a theatre a series of simple operating rooms, each containing a table, steriliser, and bare necessary equipment, such a system is as cheap, and possibly cheaper from the point of view of lighting and heating, can usually, if compact, be run by one expert nurse, and enables several operations to be performed simultaneously. A few students can be admitted to each room, if desired, the only difficulty being in connection with anæsthetics, but should the resident pupil come to occupy the position suggested in a previous issue, this impediment could be overcome. It would be quite possible to have three or four such rooms in any modern hospital—even six, in series, each opening consecutively by sliding doors into the next.

PERSONAL.

Sir Vansittart Bowater has been elected by the Court of Aldermen an Almoner of Christ's Hospital.

Col. George D. Hunte, D.S.O., has been appointed a temporary surgeon-general while a director of medical services.

Col. Harold Hendley, M.D., I.M.S., has been appointed an honorary surgeon to the King, *vice* Surgeon-General Sir L. D. Spencer, K.C.B., M.D., deceased.

Dr. Kaiker A. Anklesaria, L.M.S., of Bombay, has been appointed by the Islington Guardians third assistant medical officer at Highgate Hill Infirmary. Dr. S. B. Gadgil, deputy medical superintendent, was recently granted permission to join up for service during the war.

Dr. Aylmer May, Principal Medical Officer of Northern Rhodesia, has been selected by the War Office to undertake research work on the Western front in connection with wound infection. Dr. May, who is now *en route* from South Africa, has done valuable bacteriological research work in Rhodesia and elsewhere, especially in regard to sleeping sickness.

Colonel A. W. Sheen, who has been appointed to take charge of the Welsh Overseas Hospital, is to be succeeded in command of the Welsh War Hospital at Netley by Dr. Herbert G. Cock. Dr. Cook resides in Cardiff. He obtained his M.D.Lond. (gold medal) in 1893; F.R.C.S., England, 1891; D.P.H., Cambridge, 1893. He has been in practice at Cardiff for 23 years and has been closely associated with the King Edward VII. Hospital for nearly 21 years, and is now senior assistant surgeon. He is also medical officer of H.M. prison at Cardiff.

CLINICAL LECTURE

ON

CLINICAL CHARACTERS AND THERMAL CURVE OF PARATYPHOID FEVER.

By M. J. LEVY-VALLESI,

Medecin Aide-Major, Premiere Classe.

THE collective clinical and pathological study of paratyphoid fever which is here submitted to the reader deals with the outstanding features displayed in a series of 50 cases of that disease. Of this number of detailed observations, 28 were made and personally recorded by the present writer. For the written records of the remaining 22 cases he stands indebted to the obliging kindness of Dr. Bichelonne, Médecin-en-chef, and of his associates, M.M. Kruger, Mazoux, Jacquet, and Lamaze.

In 40 of the total number of this series of cases, the hæmoculture yielded positive results; in each of the remaining ten the diagnosis was further corroborated by the evidence of the sero-diagnosis.

THERMAL CURVE.

There is no existing curve which can be said to be actually typical of the thermometric phenomena of paratyphoid fever. Nevertheless, we may regard with special attention three general curvilinear types, and some irregular forms which do not lend themselves to any definite classification of outlines. I shall here describe three types of thermal curve :—

(*a*) Curve without plateau;
(*b*) Curve with elevated plateau;
(*c*) Curve with low plateau.

(*a*) *Curve without Plateau: the Brief Type.*—Here we are dealing with the class of individual patients who arrive in hospital on the third or fourth day from the onset of the disease. The temperature is then found to be at 39° (102.2° F.) or 40° (104° F.), but this elevated standard is not maintained, as the thermometric record immediately commences to display a graded serial course of descending oscillations, which extends over a variable period of time (varying from seven to fifteen days). We have here had an opportunity of obtaining a complete thermometric tracing from an official who contracted paratyphoid fever in the course of his service. This was found to display a period of ascending oscillations which occupied five days; afterwards supervened the jagged line of descent, which extended over an interval of eleven days. Thus, if we just suppress the plateau of the thermometric tracing of a case of normal typhoid fever, we have before us a typical one of this, the brief type of paratyphoid fever.

This outline curve of thermometric tracing appears to me to be specially distinctive of the course of paratyphoid fever (it was typically displayed in 17 of the 50 cases). I cannot, however, assert that it should be regarded as pathognomonic, inasmuch as I have met with it in two cases of genuine typhoid fever. On the other hand, I must not neglect to point out the possibly determining fact that these typhoid cases had received two and four injections of anti-typhoid vaccine, respectively.

(*b*) *Curve with Elevated Plateau.*—This type of thermometric curve presented itself in 19 cases of the 50 observed. It represents, indeed, the thermal chart of a case of serious genuine typhoid fever with a plateau ranged at 39° (102.2° F.) or 40° (104° F.) The period of duration of the fever is one of fifteen days, in rare instances extending to three weeks; the defervescence is a rapid one, and is completed in three or four days. It is to this variety of paratyphoid, as will readily be conceived, that the graver forms will be found assignable.

(*c*) *Curve with Low Plateau.*—In cases of this type the plateau is found to maintain a standard level of about 38° (100.4° F.), while the maximum period of duration is limited to fifteen days.

Intermediate types of the thermal curve of paratyphoid fever may also be described: that of which the plateau is first maintained at an elevated standard, afterwards subsides to a low; that in which there is at first no plateau, and then a low one presents itself; these are irregular types, of course, but all the examples are found to be more or less definitely assignable to respective places under the heading of one of the three above-mentioned formulæ.

PULSE.

The pulse of paratyphoid fever is found to follow rigorously the grade of the thermometric curve. Its maximum varies from 80 to 100, but we have constantly observed (in 27 of the 28 cases specially noted) that a slowing of the pulse-rate occurred at the apyretic period, when it was found to fall to even 60 pulsations per minute, and often lower (48, 52, 54). In the single case of a patient who had presented an exception to the rule just now mentioned—whose pulse continued to maintain a rate of 80—a relapse occurred afterwards. (*a*)

These facts deserve to be studied side by side with those which we have collected in the clinical observation of typhoid fever proper. (*b*)

CLINICAL CHARACTERISTICS.

Taken as a whole, the clinical picture presented by paratyphoid resembles that of a benign form of typhoid fever proper in many of the cases, although pretty often it will be found to assume the features of a grave type.

My own observations have led me to the general conclusion that the degree of torpor presented by the patient is generally less than in true typhoid fever, while the rose spots are of frequent occurrence; and, indeed, as has been already stated by others, they sometimes present themselves in such abundance that one would be led to the conclusion that we were dealing with a case of an exanthematous fever.

The pulmonary manifestations are merely of the most ordinary type (bronchitis, congestion)

Three of the observations of which we have preserved the record appear to me to be specially worthy of note.

Observation 1.—Paratyphoid with relapse. Intes-

(*a*) Since the above article was written, the recorded observations of a new series which included twenty cases have without exception corroborated the conclusion above formulated.

(*b*) A serial study which included the clinical records of 150 cases of typhoid fever has conducted me to the prognostic conclusion that a slowing of the pulse down to 60 beats per minute, or less, which in typhoid proper is of frequent occurrence—although less constant than in paratyphoid—is a very valuable sign of *definitive* recovery. In the course of those cases which are destined to subsequent relapse the pulse-rate never falls so low.

tinal hæmorrhage. G., *étameur*. Had been ailing twelve days at the time of his admission to hospital (insomnia, cephalalgia, angina), to which he was conveyed by an ambulance on December 16th. On examination: temperature 40° (104° F.), pulse 80, diarrhœa, outline of spleen not perceptible. Hæmoculture: paratyphoid A.

Evolution.—Thermometric curve of the type without plateau; apyrexia on the thirteenth day; apyretic period continued during three days, the pulse still maintaining a rate of 80 per minute.

On January 2nd, the temperature went up to 39.8° (103.64° F.); on the 4th the plateau was maintained at the approximate standard of 39° (102.2° F.); this level was maintained during nine days, when an abrupt descent to 37° (98.6° F.) occurred. The ascent to 39.8° (103.64° F.) had been preceded by a descent to 36.4° (97.52° F.), which accompanied an intestinal hæmorrhage of moderate intensity (extending over two days).

Hæmoculture was again practised on January 4th, and revealed the presence of the Bacillus paratyphosus A.

Observation 2.—Pleuro-paratyphoid pneumonia, with purulent transformation of the exudate. B., æt. 20. Had previously been vaccinated against typhoid fever.

Taken in the ambulance on January 13th. He had already been ill during the previous three days: cephalalgia, insomnia, epistaxis, left thoracic pains. On admission, temperature 39.8° (103.64° F.), pulse 100. Indications of a small amount of pleural effusion at the left base. During the succeeding days the temperature was maintained in the standard vicinity of 40° (104° F.); the amount of fluid pleural effusion increased, and dypsnœa developed. On the 19th. 900 c.c. of sero-fibrinous fluid were evacuated by puncture.

From the 25th to the 28th there was a period of descending oscillations, which was arrested at 38° (100.4° F.); then followed a stage of ascending oscillation, which in the course of eight days brought the curve up to a height of 40.2° (105.36° F.); during this time the pleural effusion was being slowly replaced. On February 4th, the fever again began to diminish in degree. and reached 38° (100.4° F.) in the course of three days.

In brief, we had, up to that date, had to deal with two exacerbations of paratyphoid fever, of which the first presented a thermometric curve furnished with a plateau, whereas the second had none. The diagnosis was confirmed by the sero-diagnostic demonstration of a positive at 1-500, or paratyphosus B, with the blood and the pleural fluid of the patient; while this reaction proved negative with the bacillus of Eberth.

On February 9th a rigor occurred, a "stitch in the side" developed, and the temperature went up to 40.4° (104.7° F.), and all the evidences of pneumonia of the right summit rapidly developed (stethoscopic signs, rusty sputa, etc.). A thermometric plateau of 40° (104° F.) was then maintained during a period of six days. On the seventh day there was a rapid subsidence to 38° (100.4° F.) During the next eighteen days, the temperature was maintained at that level, and above. The pleural effusion continued to increase slightly; the face was pale; there were profuse sweatings, with a slight degree of albuminuria. On March 4th, an exploratory pleural puncture yielded a purulent fluid, which contained pneumococci. The patient was then transferred to a surgical ward, where he was operated on.

Observation 3.—Paratyphoid fever. Intestinal pseudo-perforation. Death. P., æt. 20. This patient had reached the twenty-third day of a fever characterised by the presence of Bacillus paratyphosus A, and a thermometric curve with elevated plateau, when, on the third day after the appearance of the apyrexial period, all the usual indications of intestinal perforation suddenly developed, and were followed by death after two days. The autopsy showed no perforation. (A full account of the case and of the revelation of the autopsy will subsequently be published.)

To this account of a fatal case it would be very suitable to add a note of the result of a case observed by my associate M. Kruger. The latter presented a course of fever of an ataxo-dynamic type, which on examination revealed the presence of the Bacillus paratyphosus B. A fatal result supervened, which was due to pulmonary complications. These two cases bring the mortality in the series of paratyphoid cases studied by us up to 4 per cent.

It would not seem to appear that the difference due to the presence of the A or B variety of the specific would prove to be a factor of gravity, or was even accompanied by any special clinical indication. In the series of 40 hæmocultures which were carried out, the Bacillus paratyphosus A was found in 23 specimens, and the Bacillus paratyphosus B in the other 17.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by James Campbell McClure, M.D., Physician to the French Hospital in London, and to the Hospital for Consumption, Margaret St. Subject: "The Hydrological Treatment of Gastro-Intestinal Stasis."*

ORIGINAL PAPERS.

ON THE TRAUMATIC NEUROSES.*

By D. W. HARRINGTON, A.M., M.D.,
Milwaukee.

The importance of a knowledge of the surgical neuroses has greatly increased during the last few years especially in the larger cities. The great increase in rapid locomotion, the greater complexity of modern human relations and the increase in the number of those especially predisposed to nervous disorders with the increase of urban population justifies increased study of these remarkable neuroses. The much larger knowledge of these phenomena by the legal profession makes it imperative that we do not neglect them.

I have long had the feeling that the special training and the daily work of the average general surgeon unfits him to appreciate the finer things of the nervous system, and develops in him scepticism concerning those nervous disorders that have not a basis of visible pathology. It has not been an uncommon thing in the past to hear a railway surgeon express the opinion that the traumatic neuroses amount simply to a question of the adjustment of damages.

Undoubtedly certain persons are more susceptible to injury of the nervous system than others; many have a special predisposition to the disorders that we call neuroses, yet as good an authority as Putnam states that "it is certainly true in the great majority of cases no neuropathic tendency in the usual sense, can be detected even when severe results arise from trivial accidents."

As to the classes of persons who are most frequently affected by such accidents, those with irritable, responsive, sensitive nervous systems,

* Read before the American Association of Railway Surgeons, November 15, 1915.

those with narrow experiences, restricted lives and limited resources and income and those with very little training in self-control are most numerous. They are more common in persons taken suddenly and unawares and to whom a horror or calamity is apparent. They are less common among those injured while asleep or intoxicated. It is an interesting and significant fact that the traumatic neuroses seem to be relatively infrequent among those injured in the various sports and during the horrors of war. It is possible that the tension of expectation or anticipation may account for this fact. What the result of accidents due to aerial navigation will be remains to be discovered. (Since the European war began it has been stated by Bonhoffer and Wygandt that while there is no special war psychosis, latent hysteria, epilepsy, delirium, slight imbecility, maniac depressive or catatonic tendencies are likely to be fanned into activity. Prompt removal from the field into a zone of quiet and comfort is important both in the interests of the patient and because of the danger of the development of "mass-psychoses" or "imitation psychoses" among the troops. Among the ethologic factors in the production of these psychoses are included emotional stress, fatigue and lack of alcohol among those accustomed to its use. These factors are active even during mobilisation. In battle we have in addition physical injury; air impact from the passage or bursting of a shell is sufficient to give any degree of trauma to the nervous system even to the production of instant death. The writers strongly recommend the immediate administration of morphine 0.01 to 0.02 gm. and scopolamin .0005 to .001 gm. The percentage of these cases of psychoses in war runs from about .5 to 2 per thousand).

The traumatic neuroses may for the purposes of our consideration be classed as neurasthenic and hysteric. There is some diversity of opinion as to exact classification. A few years ago we heard of traumatic neurasthenia; later it was stated that traumatic neurasthenia was characterised by frequent signs and symptoms of hysteria. Albutt, who wrote the article on neurasthenia in the last edition of his "System of Medicine," states that the most notable change in opinion since Victor Horsley wrote the article in the previous edition was "the intrusion of various degrees of hysteria into the process." Another authority says "the psychic element is much more prominent in these cases than we used to think." An English authority (Knopp) after an analysis of 200 cases finds that 70 are cases of hysteria and 50 of neurasthenia.

Dercum says hysteria must be clearly differentiated from neurasthenia with which it has nothing in common; it may not have a single fatigue symptom. Hysteria may be as clearly differentiated from psychasthenia and hypochondria which belong in the group with neurasthenia.

All authorities agree that hysteria is a purely psychic disorder and has no fixed symptoms. It is generally agreed that neurasthenia is a definite disease of mental origin with symptoms as real as those purely physical. Much of what is called hysteria in women is neurasthenia, or what is still more common—the *most* common neurosis in women according to Llewellyn Barker of John Hopkins—psychasthenia. Barker says that hysteria is a relatively rare disorder.

Of the traumatic neuroses, I think, we may say that neurasthenia and hysteria are equally common, and that like other definite and distinct diseases, the one may be a complication of or be superimposed upon the other. Neurasthenics may show signs and symptoms of hysteria at times and cases of typical hysteria may have symptoms of neurasthenia.

The special distinguishing mark of hysteria is susceptibility to suggestion. It is further marked by lack of fixed symptoms, alterations of character, convulsive crises, paralyses, contractures, anæsthesias, amnesias, great desire for attention and notice, lack of judgment, variations in mood, and action on sudden impulse.

The special distinguishing mark of neurasthenia is fatiguability. It is the fatigue neurosis, the irritable weakness. It shows weak volition and weak inhibition, physical and mental inadequacy, lack of self-confidence, persistency and concentration.

Psychasthenia, often included with neurasthenia, is marked especially by fears, anxieties, obsessions, impulses rarely yielded to, sense of danger of impending occurrences, sense of incompleteness, lowered psychologic tension and forced agitations. It shows a tendency to periodicity.

Hypochondria is marked by an all compelling fear of disease, excessive psychic distortion of sensations of disease, real delusions regarding one's physical condition as compared with true neurasthenia.

Pathology.—I hesitate to say a word about pathology in relation to the neuroses. If medicine has taught one thing positively it is not to theorise. Just a word. All the nerve cells and centres of the central nervous system are present at birth. What physiologists call the organisation of the nervous system takes place later, largely before puberty but not completely before the fiftieth year of life. By organisation is meant the connecting up of the various cells and centres by the development of neuroses, dendrons, dendrites and dendritic processes. If we are ever to know anything of the pathology of hysteria I feel confident that it will reveal a weakly organised nervous system and in the case of traumatic neuroses a partially disorganised nervous system, especially in the higher and phylogenetically later developments of will, reason and judgment, volition and inhibition.

With regard to the neurasthenic groups we have reason to believe that the essential deficiency is in the protoplasm of the nerve cells. Hodge showed these deficiencies in the protoplasm of thoroughly fatigued cells in the active nerve centres of lower animals. There are probably other deficiencies of a chemical nature. Hill and Bernard in London did some experimental work showing that lax abdominal walls with naturally low blood pressure permitting the blood to leak into the splanchnic area vessels was a characteristic of neurasthenia. There is much evidence to show that the neurasthenic group is often associated with the lowered conditions accompanying organic disease such as chronic tuberculosis, cardiac disease, arteriosclerosis and some organic diseases of the nervous system.

Age.—The neuroses seem to belong chiefly to the period of life from puberty to middle-age. Neurasthenic conditions are most frequent from 20 to 30 years of age. When neurasthenic symptoms appear after 50 one should search very carefully for some organic disease. Hysteria is most common from 20 to 40 but may appear at any age. Children resist the shock of accidents well, old age badly; it frequently precipitates premature senility.

Sex.—Women are more subject to the hysterias, mild neurasthenia and especially to psychasthenia. Men more frequently have the severe neurasthenias and hypochondria, and we know now that traumatic hysteria is much more frequent in men than was formerly thought. Women are more frequently afflicted than men in proportion to the number exposed to accidents and are slower to

recover, but as men are more frequently exposed to violence the majority of cases that come before us for examination are men. Cabot says labouring men have no right to such troubles as neurasthenia, but we find that the traumatic neuroses are not uncommon among them and they seem to be more common than formerly.

Diagnosis.—The viewpoint of the practical surgeon employed by a corporation and the modern neurologist is quite different. I think there is a middle ground where reasonable neurology and practical common sense may meet and in a measure agree. Our chief difficulty is in diagnosis, in the proper estimation of the value of signs and symptoms. Many of the subjects that come before us are interested in making out a case, in some cases wilfully, in others unconsciously. It is well to start with Weir Mitchell's admonition to "watch her enter the room." Another of the wise ones, Osler, says, "Observe him as he enters the room, his clothing, manner of carriage, facial expression, the humour he is in. The appearance of the patient is often quite characteristic, suggesive but difficult to describe." Osler further says "neurasthenia is a disease above all others which has to be diagnosed from the subjective statements of the patient and from an observation of his general behaviour rather than from the physical examinations." In hysteria the facts stated by the patient help but little; the method of stating them may help much. There is a diagnostic value in the rather extravagant language in which the trials and sufferings are related and in the unusual features and the halo of mystery with which an attempt is made to surround the case. It is very important to let the patient tell his own story and tell all there is to the case; avoid suggestion in the way of question. As one authority puts it: "The pain that is not, when asked for, soon becomes." The same is true of other symptoms.

We can hardly speak of an acute neurasthenia, though a quite abrupt appearance may show itself after unnoticed premonitory symptoms. But as a rule, neurasthenia is of gradual development through weeks or perhaps months after an accident; in some cases it may seem to develop out of the depression of the surgical shock if the accident involves severe physical trauma. But the depression of surgical shock is not neurasthenia. Hysteria may appear immediately after an accident, or it may appear suddenly or develop gradually after a so-called latent or "incubation" or "meditation" period. During this period the patient has time for the direction of concentrated attention to the accident, often to the particular part of the body involved or supposed to have been involved in the accident. During this period of meditation there goes on quietly the work of autosuggestion that finally develops the hysterical outburst. Traumatic hysteria differs from the ordinary hysteria of constitutional origin in that the outburst is often preceded by an unnatural calm; this seems particularly true of post-operative hysteria. It also differs in that it does not often show so many of the ordinary signs and symptoms; it is more likely to show major seizures; it is also more likely to be a mono-hysteria, for instance, an injury to a limb may be followed by a hysterical contracture involving that limb only.

Pain is a prominent symptom in both varieties of neuroses, and as in many other diseases, is often the first and most prominent symptom in the complaint. The average mind instinctively associates pain with injury, and, in making out a case, will emphasise, often overemphasise, the pain present, whether it fits into the rational symptomatology of the case or not. This is especially true in hysteria; the pain is agony. Speaking of pain in hysteria, Starr says: "It is very acute and the patients appear to suffer intensely. It is more agonising than any disease of the organ could give. These are mental pains, true hallucinations of pain and are little affected by analgesic remedies, even hypodermics of morphine, except as these act by suggestion; these pains are often suddenly relieved by suggestion. In these cases joint pains are not attended by other signs of joint inflammation except spasm of the muscles on moving the joint." Starr quotes a case of such joint pain that, when the joint was amputated, appeared in the corresponding joint of the other limb.

Pain in the back is almost a constant complaint in both varieties of traumatic neuroses. It may be limited to certain spinous processes, with radiations from then, or it may be quite diffuse. Undoubtedly much of the pain in the lower back is real pain due to strained muscles and ligaments of the back in falling or resisting fall. Herbert Page believes that even where there has been no violence at the moment of jar or shock the lumbar and dorso-lumbar muscles, ligaments and articulations are thrown into such sudden stress and strain that pain, muscle spasm and deep tenderness are the legitimate result. Such pain is not part of the neurosis but is referred to because it is so very common in these traumatic cases.

The pain in neurasthenia is less severe than in hysteria; there is pain and tenderness in the nape of the neck and over the spinal processes, in the head, tenderness of the scalp, hyperæsthesia of the skin, sensitiveness of internal organs. Mental pain is often pictured in the face. The special senses are often acutely sensitive. The threshold of pain and sensation is often far above the normal. The headache of neurasthenia is usually occipital; it may be frontal. The headache is not a sharp pain but rather a strange band-like feeling. The feeling of pressure within the head is quite constant.

In traumatic hysteria two symptoms most frequently met are paralysis and anæsthesia. They are usually associated; of course, there may be much anæsthesia without paralysis. Motor paralysis in these cases means a mental inability to initiate volition. Paralysis on the left side seems to be three or four times more frequently found than on the right side. According to Burt, paralysis of the left arm and much less complete paralysis of the lower limb on the same side is most frequent. According to others the lower extremity is more frequently affected than the upper. In hysteria, as a rule, the paralysis is more complete than organic paralysis. There is never loss of the knee jerk as in organic paralysis. The knee jerk is usually increased but the whole leg or body is jerked. True ankle clonus is never present. The movement is an irregular to-an-fro movement. True Babinsky's reflex is never present. One can often succeed in developing sufficient voluntary motion in these cases to differentiate them from organic paralysis. Minor degrees, amounting to weakness of the part often follow trifling injuries. In extreme cases there may be very complete paralysis of large portions of the musculature of the body.

Anæsthesia and analgesia are very common. They are irregular in area, not corresponding to nerve distribution. The injured part may show anæsthesia especially if it be a limb. The chest shows none, as a rule, the head and particularly the face less than the limbs. The area is often glove-like, the sleeve-cuff or stocking-form. There are often patchy and variable areas; it comes and goes readily. Anæsthesia of the mucous membranes is more frequently found than has been thought. An authority says "the anæsthetic conjunctiva is the mark of hysteria." It is well to test the nares for

sneezing and the fauces for retching. The pain sense is more completely absent than in organic trouble. The outline of areas is better defined than in organic disease.

It is stated that concentric contraction of the field of vision may be the only positive sign of hysteria present. The field of vision may be of the "shifting type," narrowing during the examination. There may be partial or total deafness on either or both sides, usually on the side on which the cutaneous anæsthesia is well marked. In mild grades of hysteria hearing may be exceedingly acute. The "irritable eye," irritable to light, belongs to neurasthenia, but the victim of hysteria prefers a darkened room. Colour vision should be tested; the red field may be larger than the blue, which is contrary to the normal condition. One object may appear as several. A familiar object may not be recognised by vision, yet readily recognised by feeling it. One may be able to recognise very small objects, but not large ones. In these cases the examiner should not be too ready to assert that the person is indulging in conscious deception.

Tremor is frequently found in both hysteria and neurasthenic cases. In typical traumatic neurasthenia a fine tremor is almost constantly found about the eyes and often in other parts of the face. A fine tremor of the tongue is very common; tremor is not likely to be found in the case of a malingerer, unless possibly in the case of a victim of alcoholism. Severe fright may give rise to a tremor which may become permanent.

In hysteria there may also be a very fine tremor often seen in the hands, at times in the face or tongue, not unlike the tremor of alcoholism. The tremor of hysteria is often coarse and jerky.

There is a characteristic tremor that belongs to "an obscure traumatic degenerative psychoneurosis analogous to a severe form of paralysis agitans" (Putnam). The hysterical tremor in some cases is of the type of intentional tremor.

The more carefully the convulsions of hysteria are analysed the less they appear like those of epilepsy. The initial cry, the lack of suddenness of the fall, the character of the movements are all different. The epileptic convulsion rarely lasts longer than a few minutes, the hysterical often very much longer. The former are rarely immediately repeated, the latter frequently. The movements of the hysteric usually partake of the character of a purposeful struggle. Epileptic convulsions are most frequent at night or in the early morning; hysterical in the day or evening, after some excitement and always in the presence of some audience.

We should not lose sight of the fact that the traumatic neuroses may be present with organic disease; their symptoms may easily lead one to overlook the early stages of organic disease. One should inquire into the health of the patient for some considerable time previous to the alleged injury. An apoplexy may have caused the fall and the paralysis rather than the sudden movement of a car, or the shock of an accident may have superinduced an apoplexy in a subject already prepared to have one. Hysterical symptoms with an intentional tremor may all be the symptoms of a multiple neuritis, and in some cases it may be very difficult to make a differential diagnosis. A number of organic brain diseases such as tumours in their early stages, trauma with microscopic hæmorrhages or other lesions, hæmorrhagic meningitis and septic encephalitis may cause typical outbursts of hysteria. Other diseases and organic lesions in their early stages give origin to typical neurasthenic symptoms. One should always be on the look-out for tabes, paresis, multiple sclerosis, arteriosclerosis and especially the conditions that lead to an apoplexy, chronic tuberculosis, cardiac diseases, the true insanities, and Albutt emphasises rheumatoid arthritis.

According to Dercum, the traumatic neuroses never originate the true insanities. Of course, a person with a strong predisposition to insanity after trauma or severe shock may become insane and the trauma or shock may have acted as the exciting cause.

During late years we have been learning that in the production of the traumatic neuroses the psychic factor is much more prevalent than was thought. We are learning that mental or emotional shock gives just as pronounced and troublesome symptoms as actual lesions of nerve tissues. We are learning that physical violence of the most trifling character may give intensified symptoms if it so disconcerts the victim that he cannot call into use the protective power of the will, or if the violence is of such a kind, as, for example, injury to the head, as to create apprehension of trouble to come. We are also coming to realise that what otherwise might be an innocent matter may become a serious and prolonged trouble if accompanied by severe pain and loss of sleep and that the proper management in the beginning of traumatic hysteria may save great distress and expense.

We are learning that injuries of moderate severity such as jars or falls without fracture or serious visible contusion may cause actual lesions of nerve tissue, minute hæmorrhages in the brain or cord, necrosis of nerve elements, and widespread vasomotor disorders, with typical traumatic neuroses as the only symptoms, just as they may be the only symptoms in the early stages of brain tumour. We are learning that many persons have diseases or disorders in a latent form or a latent tendency to disease that may be rendered active by physical or psychic trauma.

The diagnosis in these cases is often complicated by a variety of interests, medico-legal and others. Conscious simulation is often present. Unconscious simulation is largely in proportion to the degree of hysteria present, but that is the way of hysteria, and the person is not to be charged with feigning and fraud. The worry over legal complications, loss of work, expense which is always a serious matter to the poor, the possibility of permanent invalidism, all these play their part in affecting the course of the trouble and in making the case difficult to manage.

Scientific conclusions must be arrived at chiefly in those cases developing after accidents in which there is no possibility of making claims for damages or insurance. The tendency has been not to give these cases due consideration especially where there has not been gross physical injury.

Prognosis.—According to Bilstrom, a Swedish writer, complete recovery occurs in about 90 per cent. of the cases. The longer the interval the larger the percentage of complete recoveries. If a complete settlement could be made immediately it would shorten the course of many cases. Unfortunate suggestions and repeated examinations render the prognosis less favourable, especially in hysteric cases. The local or mono-symptomatic cases of traumatic hysteria do the best; as previously indicated, these are not likely to have a constitutional hysteric basis. Uncomplicated neurasthenia makes a good recovery as a rule. Complicated cases and those with a marked constitutional basis are often slow and trying. Strümpel says: "We know of many cases where such patients, in spite of the fulfilment of every desire, have lived for years in a state of permanent neurasthenia, incapable of anything, and finally have fallen into a state of profound mental dullness."

CURRENT INCOME TAX AND ITS INTEREST TO THE MEDICAL PROFESSION.

By ERNEST EVAN SPICER, F.C.A.,

Author of "Income Tax and the War"; "Income Tax, 1915-1916 and Before"; "Income and Super-tax and its Legal Evasion"; "Income Tax Claims and Appeals," etc., etc.; Joint Author of "Income Tax in Relation to Accounts," etc., etc.

THE increases in the various Rates of Income Tax which have been made since the commencement of the European War, and especially those now in force under the provisions of the Finance (No. 2) Act, 1915, cannot fail to be of interest to the Medical Profession, and it is desirable that all those who are called upon to contribute to the State in respect of this Tax should be alive, not only to the Rates in force, but also the rights and privileges which the various Acts, making up the Income Tax Code, give to the taxpayer.

The Standard Rate of Income Tax at the present time is 2s. 6d. in the £, with Lower Rates applicable to Earned and Unearned Income under certain conditions. For the Fiscal Year 1915-16 these rates are increased by 20 per cent.

So far as the payment of Tax is concerned, the amount due under the first Finance Act, 1915, is payable on January 1st, 1916, and the Additional Percentage, which is added by the Finance (No. 2) Act, 1915, is payable on July 1st, 1916. This, however, only applies as far as the Profits from carrying on business are concerned.

In future years it is proposed that the whole Income Tax for the year shall be payable, one half in January within the Fiscal Year, and the other half in the following July.

Earned Income.—Where the Total Statutory Income of a person, including that of his Wife, does not exceed £2,500, such person may claim to be assessed in respect of the Earned portion of the Income as follows :—

Where the total Income exceeds		But does not exceed		Rate of Tax on Earned Income.
£130	...	£1,000	...	1s. 6d. in the £.
£1,000	...	£1,500	...	1s. 9d. ,,
£1,500	...	£2,000	...	2s. 0d. ,,
£2,000	...	£2,500	...	2s. 4d. ,,
£2,500	...	——	...	2s. 6d. ,,

and these rates are increased for the year ending April 5th, 1916, by 20 per cent., and in the year ending April 5th, 1917, subject to any subsequent legislation, by 40 per cent.

It was formerly necessary to claim this Relief before September 30th of the Year of Assessment, but this limit of time has now been removed.

Unearned Income.—Where the Total Statutory Income of a person, including that of his Wife, does not exceed £500, such person may claim Relief in respect of the Unearned portion as follows :—

Where the total Income exceeds		But does not exceed		Rate of Tax on Earned Income.
£130	...	£300	...	2s. 0d. in the £
£300	...	£500	...	2s. 4d. ,,

and these Rates are increased for the year ending April 5th, 1916, by 20 per cent., and in the year ending April 5th, 1917, subject to any subsequent legislation, by 40 per cent.

In the majority of cases the Tax on Unearned Income will be collected at the source, and in order to obtain the Relief, a Claim for Return of Tax will have to be made after the expiration of the Year of Assessment.

Statutory Income.—It must be noted that in order to avail himself of the foregoing Rates in respect of Earned and Unearned Income, the Statutory Income of the person concerned must be within the limits named. In this connection it is important to observe that the Statutory Income is not the Actual Income, but the average of the three years completed prior to the commencement of the Year of Assessment—*i.e.*, April 6th.

The Profits or losses of these three years have to be adjusted in accordance with the Rules and Regulations of Income Tax—*e.g.*, certain items of expense are not allowed in computing the liability.

Exemptions.—The person whose Total Statutory Income does not exceed £130 is exempt from Income Tax, and where any portion is Unearned, and Tax has been deducted at the source, a claim for repayment of such Tax can be made.

Abatements.—Persons whose Statutory Incomes do not exceed £700 are entitled to treat a portion of such Income as not taxable. An abatement is allowed in respect of this portion, and Income Tax will be payable on the remainder. The abatements now in force are as follows :—

	Abatement.
Where the Total Income does not exceed £400 ...	£120
Where the Total Income exceeds £400, but does not exceed £600	100
Where the Total Income exceeds £600, but does not exceed £700	70

Allowance for Children.—A person whose Statutory Income does not exceed £500 is entitled to an additional abatement of £25 in respect of each Child under the age of 16 years living at the commencement of the Year of Assessment.

Life Insurance.—An additional Abatement is allowed in respect of Life Insurance Premiums up to an amount not exceeding one-sixth of the Total Statutory Income. In calculating the Life Insurance Premiums, however, it must be remembered that Relief will not be granted in any year in the case of any premium for securing a Capital Sum payable on death, to an extent greater than 7 per cent of the Capital Sum insured.

It must also be remembered that the limit allowed in any year in respect of Premiums for securing benefits other than an amount payable at death—*e.g.*, Deferred Annuities—is £100.

Life Insurance Premiums payable in respect of a Policy on the life of the Wife of the Taxpayer may be claimed within the limits above mentioned.

For the Income Tax years 1914-15, 1915-16, and any subsequent year during part of which the European War continues, the Relief granted in respect of Insurance Premiums may be claimed on the basis of the Statutory Income for the year ending April 5th, 1914, if this basis is more advantageous than the Statutory Income of the Actual Year.

Any Tax overpaid for the year 1914-15 can be reclaimed, the concession being retrospective to this extent.

Concession with regard to Percentage Addition to Rate in the Case of Reduced Incomes.—If an Individual who has been assessed to Income Tax claims and proves that his Actual Income from all sources during the Fiscal Year 1915-1916 is less by more than 10 per cent. than the Income on which he has already been assessed, he shall be entitled to repayment of either the whole or a proportion of the additional 20 per cent. Tax paid by him in accordance with the following Table :—

Percentage by which the Actual Income is less than the Income on which Income Tax has been assessed or charged.					Amount of Repayment of Additional Tax.
11 per cent.	and under	12	per cent.	...	10 per cent.
12 ,,	,,	13	,,	...	20 ,,
13 ,,	,,	14	,,	...	30 ,,
14 ,,	,,	15	,,	...	40 ,,
15 ,,	,,	16	,,	...	50 ,,
16 ,,	,,	17	,,	...	60 ,,
17 ,,	,,	18	,,	...	70 ,,
18 ,,	,,	19	,,	...	80 ,,
19 ,,	,,	20	,,	...	90 ,,
20 ,,	and more			...	100 ,,

Reduction of Income owing to the War.—In cases where the Adjusted Profits of the Year of Assessment are proved to be less than the average of the last three years, including the Year of Assessment, and it can be shown that the diminution is due directly or indirectly to the War, Income Tax may be recovered on the difference between the amount of the original Assessment, and of the new Average so taken, or of the Actual Profits, whichever are greater.

If, however, the Taxpayer is serving with the Military or Naval Forces, or abroad with the British Red Cross Society or the St. John Ambulance Association or other body with similar objects, he can get the Assessment reduced to the Adjusted Profits of the Actual Year, even though these are smaller than the New Average.

Application of pre-War Rates.—If any person who has served or is serving as a member of the Naval or Military Forces of the Crown, or on Naval or Military service in connection with the European War for which payment is made out of moneys provided by Parliament, or in Red Cross or Ambulance work abroad, proves that his Total Income from all sources does not exceed £300, he may claim to pay Tax at the rate in force immediately before the commencement of the War.

If his Total Income does not exceed £160 he will be exempt, otherwise he will be entitled to an abatement of £160, but his allowance in respect of Life Insurance Premiums or Children will be as previously stated.

Super-Tax.—Super-Tax is an Additional Tax payable by all persons whose Statutory Income for the year preceding the Year of Assessment exceeds £3,000, and the Tax is payable in those cases on the amount by which such Income exceeds £2,500.

The following is the present scale of Rates :—

	£			£ s. d.
In respect of the first	2,500	Nil	=	Nil
,, next	500	10d. in the £	=	20 16 8
,, ,,	1,000	1s. 2d. ,,	=	58 6 8
,, ,,	1,000	1s. 6d. ,,	=	75 0 0
,, ,,	1,000	1s. 10d. ,,	=	91 13 4
,, ,,	1,000	2s. 2d. ,,	=	108 6 8
,, ,,	1,000	2s. 6d. ,,	=	125 0 0
,, ,,	1,000	2s. 10d. ,,	=	141 13 4
,, ,,	1,000	3s. 2d. ,,	=	158 6 8
And the remainder		3s. 6d. ,,		

As stated above, the Assessment to Super-Tax is made on the Statutory Income of the previous year —*i.e.* the Total Income of the previous year for Income Tax purposes arrived at in the Statutory manner.

Where the person liable to Super-Tax can prove to the satisfaction of the Commissioners that his Actual Income from all sources in the current Income Tax year is, or will be, less than two-thirds of the amount upon which he is liable for Super-Tax, he is entitled to postpone to January 1st, 1917, the payment of that proportion of the Super-Tax which represents the difference between Tax on the Income assessed and Tax on the Income of the Actual Year.

In the case of persons serving with the Military or Naval Forces of the Crown, or engaged in work abroad in connection with the British Red Cross Society or the St. John Ambulance Association, or any other body with similar objects, such person can under similar circumstances have the Super-Tax Assessment reduced according to his Statutory Income for the Actual Year.

Excess Profits Duty.—The Excess Profits Duty which has been established by the Finance (No. 2) Act, 1915, will not apply to the Medical Profession.

A SIMPLE METHOD OF ABORTING MIDDLE-EAR INFLAMMATION AND INFECTION LEADING TO MASTOID ABSCESS.*

By FRANK E. MILLER, M.D.,
New York.

FOR the past twelve or more years the writer and his two assistants, although treating a large number of cases daily, have had no cases of middle-ear or mastoid abscess. By that is meant not one case that has come to us before suppuration had been formed has been allowed to result in abscess. In other words, the pus-forming and mixed-infection elements which, although tending toward and by natural process, unrestrained, would have resulted in abscess, have been aborted.

Believing this record and my method of securing these results would be of interest not only to those engaged exclusively in ear, nose and throat practice, but also to the general practitioner, who of necessity must see and treat such cases from time to time, this brief article is offered in the hope that it may be helpful to others.

The general practitioner knows full well the tendency of middle-ear infection, suppurative and non-suppurative, to eventuate in abscess, and to extend to and involve the mastoid cells. A practicable, safe means of preventing such involvement, with its serious complications, may be described as follows :—

Morph. sulph., gr. ¼.
Atropin sulph, gr. 1-150th.
Sol. adrenalin chloride, gtt. x.
Petrolati q.s. ad (Sten'l), oz. i.

The internal ear is first cleansed as thoroughly as possible, preparatory to the application of more affirmative remedial measures. A sterilised Eustachian catheter covered with Meg. M. A. A.Co., morphin and atropin sulph. (gr. 1-4 and 1-150) is inserted into the internal ear, and any pus or other infectious material drawn off by aspiration. This preliminary step, for obvious reasons, is important.

The patient's head is now reclined upon a pillow, so that the external auditory meatus presents what may be likened to the flaring part of a funnel, formed by the auditory canal.

Into the canal is placed a 4 per cent. solution of cocain, so that if the tympanum is intact there is a small "puddle" of the solution, into which from two to four hypodermic tablets (containing morphin gr. 1-4, atropin gr. 1-150, each) are dropped, and as the cocain anæsthesia permits, gently stirred in the solution until fully dissolved. The cocain is for quick anæsthesia; the morphin-atropin combination to prolong the anæsthetic state during and after the further treatment.

A small can of antiphlogistine, previously heated in a water bath or pan of boiling water, is made ready. When at a comfortable temperature, a piece of sterile absorbent cotton is loosely wound round a wooden tooth-pick or other clean stick (of just sufficient size to go into the ear canal up to the tympanum, but not large enough to irritate or impinge on the sides of the canal) and the remedy smeared over the cotton. This is then carried into the ear and carefully placed there, and a pledget of clean cotton placed over all to protect the ear-cavity from without. The application is allowed to remain *in situ* for forty-eight hours before removal. This must be insisted on to secure the results desired.

At the expiration of the forty-eight hour period the ear is washed out, and the otitis media, mastoiditis, etc., have disappeared. Please understand,

*Reprinted from the *New York Medical Times*.

the remedy is placed right into the ear-canal, through the external meatus. This, on account of the anæsthesia already secured by the cocain and morphin-atropin applications, is practically painless, and hence practicable. If the tympanum should be so swollen and bulging and immediate destructive process is indicated, so that it cannot be saved, it can be punctured without any pain under this local anæsthesia. There is nothing harmful in this application, and I have never had any untoward results from the use of the above-mentioned preliminary treatment for securing anæsthesia. Even as high as four tablets of the morphin-atropin combination have been safely used in cases of children, even with perforation; but I would distinctly advise against morphia and atropin tablets, or otherwise, in cases of perforation of tympanum; it might be large enough to allow leakage into the mouth, causing nausea and sometimes poison to patient. This so anæsthetises the ear as to make the application and packing of the remedy tolerable. Without this precaution the patient could not endure the packing of the ear with the remedy mentioned. Usually, after the case is treated in this manner, the patient goes off to sleep for several hours, and when the packing is allowed to remain in place, undisturbed, for the forty-eight hours, the patient remains fairly comfortable. If it is removed (as has been done in some instances by other medical attendants) the pain is severe and the whole thing must be done over again. From my personal experience, therefore, I am able to state that it is the most certain, painless and practical method of treating and aborting middle-ear and mastoid complications I know of, and its apparent success leads me to send this to you, and trust the adoption of this method will lead others to the same success I am having.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

DR. T. A. WILLIAMS' LECTURE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Nothing is more pleasant to a conceited man than to be able to say, "I told you so." This I think I am entitled to do with regard to the main argument suggested by Dr. T. A. Williams' lecture in the last issue of your admirable paper. I am glad that through your courtesy I am able to conceal myself under the *nom de plume* which I am allowed to use, and am not open personally to the gibe I very likely deserve. Your readers may recollect that a lengthy correspondence on the subject of neurasthenia took place in your columns some months ago. I then insisted that the term "neurasthenia" was loose, misleading, and unscientific. I urged that neurasthenia was in fact a meaningless term, used improperly to designate a multitude of symptoms which, displaying themselves through or within the nervous system, were really due to a great variety of totally different causes. "Neurasthenia," like dyspepsia, has become a popular term, and a term most useful to a certain species of quacks. It ought to be discarded by medical men. No medical man, writing scientifically, speaks of dyspepsia as a distinct entity. This malady to the uninstructed patient means any pain or discomfort at any part of the digestive system. In this sense dyspepsia may be functional disorder due to such a cause as mental shock or prolonged grief, or to temporary or prolonged improper dietary. On the other hand, its cause may be any one of a score or more of distinct pathological processes. It may be due, for example, to ulcer of the stomach or intestine, to disease of the liver, to chronic appendicitis or hernia, or to morbid growths of many kinds. To label all the symptoms arising from these conditions dyspepsia is not more absurd than to designate all the functional nervous affections so lucidly described by Dr. Williams as neurasthenia. It would be impertinent of me to try to add to Dr. Williams' extremely valuable contribution towards elucidation of the problems with which he deals. His lecture stands out prominently among the most valuable in the long series that have appeared in your pages. It is to be hoped that its existence may be prolonged beyond ephemeral journalism, and that it may be embodied in some important permanent work which he may later produce. I must congratulate you, Sir, on the fact that you now seem to attract to your clinical pages some of the best writers in both hemispheres. It must be a source of gratification to Britishers that Dr. Williams is a graduate of a great British University. Everyone who knows anything about Harvard knows that this ancient and famous University has the opportunity and the means of attracting to its professorships the best intellects in the world, and Dr. Williams' lecture furnishes a good example of the work which these men are carrying out.

I am, Sir, yours truly,

AN OBSCURE PRACTITIONER.

ABOUT EPIDEMIC NEPHRITIS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In a clinical note on epidemic nephritis communicated by me to the MEDICAL PRESS some months ago, I hazarded the view that the ailment was possibly a renal manifestation of some modified form of enteric fever. I based this view on the presence of Bacillus coli in the urine, observed by me after the original attack.

Captain Langdon Brown controverted these opinions very emphatically, and, metaphorically, wiped me out.

I find, however, in a report of the proceedings of the Vienna Academy of Medicine, published last week, that opinions very similar to mine were expressed as to the causation of epidemic nephritis in the Germano-Austrian armies.

Osler, moreover, appears to admit very distinctly that in certain forms at least of enteric fever the kidneys are markedly affected.

I am, Sir, yours truly

J. C. McWALTER.

Dublin, January 18th.

SOME BRITISH MEDICAL MEN OF LETTERS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I have read Mr. Maidlow's paper in your last issue on "Some British Medical Men of Letters," liking it much. From the title one concludes that the author has not exhausted the subject, whilst should he be collecting data two points that occur to me may interest him.

Carlyle's brother was a doctor. Practised in Rome, retired, and when Thomas was offered his Doctorate of Laws at Edinburgh he refused the same on account of the confusion that might occur between the two. The brother, Dr. John Aitken Carlyle—I blush when I mention such a solecism or

barbarism—Turned Dante's Infernoal hexameters into prose (!) English.

Then, of course, we have our own laureate, who singeth in sorrowful numbers, Dr. Bridges.

It may be my fate to be laureate,
The honour I do decline.
I can't sell my brains to wipe out old Stain(e)s
And work for a stoup of wine.

I do not give forth this distich in the hope that Mr. Maidlow will add me to his Pathenon, but to draw the attention of poets to the fact that in old time it was a recognised axiom that the chariot wheels of the Nine needed oiling.

I am, Sir, yours truly,
JOHN FURSE MCMILLAN.

Sandown, Isle of Wight,
January 19th, 1916.

DIET AND THE CARE OF CHILDREN'S TEETH.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I read with great interest the article on the above subject by Mr. Sheldon Friel, which appeared in the MEDICAL PRESS AND CIRCULAR of January 19. It seems to me that the diet schemes suggested would be excellent for the teeth of children, but that unfortunately such diet would not suit the insides of all children. My own experience with small boys, and that of several mothers of my acquaintance, is that even the smallest quantity of fruit, in some cases even a tiny portion of jam, causes the child to lose all control of the bladder and may also cause diarrhœa. Oranges and melons are very severe to some children. Moreover, many children under seven will refuse to eat any sort of food with a distinct taste, as, *e.g.*, radishes. Even with great care and watchfulness a child will fill its mouth too full on the first opportunity, and I fear that if the meat is cut in 1-inch pieces the coroner may get some extra work. I hope to take advantage of much sound advice in the article, but these few drawbacks have occurred to

Yours truly,
DOCTOR'S WIFE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I should be grateful if you would allow me to comment on some points in Mr. Friel's paper on "Diet and the Care of Children's Teeth." As a mother who has taken personal care of all her children, I beg to differ from the author in some details.

If I gave my boy of 4 years, or my girl of 2 years, fruit, raw or cooked, or raw vegetable such as radishes, celery or salad, their digestion would be seriously diorganised for a considerable period. My experience of giving children under 6 years old meat cut in large pieces is the child either swallows it whole, chokes, or puts it out of its mouth and refuses to eat it.

I entirely agree with many points in the paper, but in others it may be misleading to young, inexperienced mothers whose children's digestions might be injured by carrying out the rules to the letter.

I am, Sir, yours truly,
MOTHER OF A FAMILY.

MILITARISATION.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—No doubt the remarks of "Sinapis" in your issue of last week and previously are in some respects justified, but much might be said on the other side. However, I wish to comment on only one point—the alleged incongruity of consultants' status and appearance with military rank and uniform. As I understand it, they—or most of them—undertook years ago that in the event of war they would put themselves at the disposal of the Government, and their commissions, which carry rank and uniform, are evidence that they are working under the King's Regulations and thereby are spending much time and skill and sacrificing much money in the service of the Empire, besides being liable for further duties if required. Some may not care for the rank, and some may doubt whether a uniform is becoming, but others may be proud of both, for sentimental reasons (not mere vanity), which cannot be appreciated by anyone in whom the feeling is not innate. In no case is chaff likely to be relished, and as there is no option in the matter, and no practical result is likely to be brought about by criticism, I venture to suggest that "Sinapis" might let the subject drop.

At any rate, as the joke about personal appearance has been doing regular duty for some time, I beg leave to recommend it for a long furlough, or even honourable (but permanent) discharge.

I am, Sir, yours truly, but
London, N.W. NOT IN KHAKI.
January 22nd, 1916.

[Very well, I agree. Enough said; at any rate for the present.—SINAPIS.]

SPECIAL CORRESPONDENCE.

FROM OUR OWN CORRESPONDENTS.

SCOTLAND.

INSURANCE ACT PAYMENTS IN EDINBURGH.

The following figures are given for the years 1914 and 1915. Payments to panel chemists—1914, £6,898; 1915, £5,823. The latter figure, however, is the net amount after a deduction of, in round numbers, £120, which has been retained pending a complete check of the prescription forms. The payments to doctors are shown in the following table:—

	1915. (1s. 4d. per person.)			1914. (1s. 9d. per person.)		
	£	s.	d.	£	s.	d.
1st quarter ...	6,248	0	0	7,809	12	0
2nd ,, ...	6,328	2	8	7,743	0	2
3rd ,, ...	6,386	4	0	8,026	5	7
4th ,, ...	6,487	4	0	7,223	5	5
	£25,448	10	8	£30,802	3	2

The list of doctors under agreement, as revised this month, includes 119 names; there are 109 chemists.

FINANCES OF THE EDINBURGH ROYAL INFIRMARY.

THE effect of the war, with its accompanying rise in the price of materials, on the cost of carrying on the Royal Infirmary, was reflected in some of the speeches made at the adjourned general meeting of the Court of Contributors held last week. It was remarked that two new records had been established during 1915: first, that there had been more patients than ever before; and secondly, that on a single day there had been very nearly 1,000 inmates. As regards the future, now that contracts are expiring, higher prices will require to be paid for everything. To an institution which consumes about a thousand quarts of milk a day, and nearly half as many pounds of beef, a rise of a penny a quart or pound

is a serious additional charge. Professor James Ritchie, Convener of the House Committee, said that with the lapse of contracts they were faced with an entirely different state of matters, and he had come to the conclusion that they would need at least £5,000 more income to maintain the same financial position as in 1914-15.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF OBSTETRICS.

MEETING HELD FRIDAY, NOVEMBER 19TH, 1915.

The President, GIBBON FITZGIBBON, M.D., in the Chair.

EXHIBITS.

PAPILLOMA OF THE VULVA.

DR. BETHEL SOLOMONS showed two specimens of the above. The first was from a single girl born in India, who had complained of pain in the vulva seven weeks previous to admission. She noticed small nodules at that time; these soon coalesced and caused her pain. She consulted a general practitioner, who commenced to remove the growth, but desisted owing to hæmorrhage. She came to Dr. Solomons, who found that the girl was a virgin, there was no vaginal discharge, and there was a spongy tumour of each labium, the one 4½ inches by 2¼ inches, the other 4½ inches by 1½ inches. An examination was made for the filaria, and a Wassermann test made; both these tests were negative. There was no sign of gonorrhœa.

The second case was very similar, in that the girl was a virgin, with no vaginal discharge; the growth was much smaller, and had been increasing for seven years. He removed the labia majora in both cases. The patients had uneventful convalescences.

Sir WILLIAM SMYLY thought it would be difficult to exclude gonorrhœa as the cause of the papillary growth.

Dr. KIDD described a case of "spurious elephantiasis of the vulva" which had occurred in his practice.

The PRESIDENT said the specimens appeared to be rather typical of what was commonly known as gonorrhœal warts. He did not think that they were essentially due to the gonococcus, but that they were evidence of a chronic and continuous irritation from some infectious discharge. The photograph of the case would suggest that there was discharge, and that the condition was of much longer duration than given in the history.

Dr. SOLOMONS, in reply, said that the growths were papillomata, and that he had no reason for altering his opinion, which coincided with the pathological report that gonorrhœa was absent. The stains at the upper part of the thigh were due to the rubbing of the growth and also to the discharge from the mushroom-like tumour, not from vaginal discharge.

A UTERUS SHOWING A CHORION-EPITHELIOMA.

Dr. ALFRED SMITH said that Mrs. M., æt. 40, the mother of many children, was admitted to the gynæcological department of St. Vincent's Hospital on September 20th, 1915. In the month of December, 1914, she had an abortion at the tenth week of pregnancy. She enjoyed good health up to the following February. She then noticed that her menstruation became heavy and irregular; hæmorrhages appeared. During March, April, and May, the irregular flows continued, becoming much heavier in July and August. The odour was most offensive. Bimanual examination under an anæsthetic showed a uterus enlarged to the size of four months' pregnancy; its consistence was soft and spongy. On washing out the uterus it was noticed that the bleeding became diminished, and no fragments of brain-like material came away. The tumour was obviously not an adeno-carcinoma. A hysterectomy was performed. The patient left the hospital at the end of her third week.

Dr. T. T. O'FARRELL gave an account of his findings. The specimen measured 11 c.m. × 10 c.m. × 7 c.m. The dilated cavity of the uterus was occupied by a large spongy hæmorrhagic mass; on section the latter was seen to be directly connected to the uterine wall, but somewhat free towards the cervical end. Microscopical sections showed three more or less distinct zones: the outer muscular wall of the uterus, an inner laminated septic blood clot infiltrated with polymorphonuclear leucocytes, and an intermediate comparatively thin zone of tumour cells. The neoplastic zone showed two distinct elements, one consisting of rather darkly staining multinucleated protoplasmic masses, which in places appeared as large giant-cells, but in others were lengthened out into bands of varying thickness, which followed the line of blood clefts: syncytial protoplasm. The other element consisted of clear distinct cells, partly vacuolated, and containing rather faintly staining nuclei: Langhans' cells. The tumour substance was seen to invade the blood-vessels and muscular tissue. There was no decidual or glandular tissue present, the tumour directly impinging upon and infiltrating the muscular structure.

Sir WILLIAM SMYLY said that fifteen years ago he had exhibited a specimen of chorion-epithelioma at the Academy.

Dr. KIDD said that in both Professor Smith's case and in that alluded to by Sir William Smyly a comparatively long time seemed to have elapsed from the date of the abortion in one case and the removal of the vesicular mole in the other before operative measures were adopted.

ÆTIOLOGY OF UTERINE PROLAPSE AND CYSTOCELE.

The PRESIDENT read a paper on this subject, in which he dealt with the normal supports of the pelvic viscera and considered the visceral layer of pelvic fascia to be the essential structure supported by the levator ani muscles. That laceration of the perinæum, even involving the levator ani, had no predisposing influence towards prolapse was certain, though it would allow cystocele to develop. Prolapse of the uterus was due to interruption of the fibres of the fascia which are attached to the vaginal fornices and the cervix uteri in what constituted the true parametric tissue, that cystocele is a hernia of the bladder through the pelvic fascia in front of the cervix, where the fascia passes between the vagina and the base of the bladder. These two conditions, though frequently confused, should be clearly differentiated for treatment. The viscera could be supported by the reunion of the fascia without interposition of the uterus, and the curative element in the present-day operations was the high amputation of the cervix, in covering the stump of which the pelvic fascia was caught in and united firmly to the uterus.

Dr. ALFRED SMITH said the importance of a torn levator ani muscle in the production of prolapse should not be lost sight of. If the levator ani, which was the muscle opposed in its action to the sphincter ani, and which dilated the latter, was torn, the sphincter could not dilate normally; a stool therefore met this muscle contracted, and, the pressure still continuing, the contents of the bowel bulged out the rectum into the lumen of the vagina, producing a rectocele. In doing this the posterior vaginal wall was drawn down, and it in turn pulled on the cervix. Cystocele occurred as a result of damage to the anterior wall during delivery. So great was the desire to save the perinæum in forceps and other difficult deliveries that the tissues beneath the symphysis were subjected to much dragging and pressure.

Dr. HASTINGS TWEEDY congratulated the President on the careful and painstaking manner in which he had demonstrated the importance of the endoperitoneal tissue. His address had made it impossible to hold fast the old faith as to the influences which compelled the uterus to remain fixed in its anteflexed position. He could believe no longer in the theory of abdominal pressure, either positive or negative, in the efficacy of the peritoneal folds—so-called ligaments—in the power of the pelvic triangles

or in the levator muscles as a means of sustaining the uterus. The point brought out by the President was that the one and only factor which counted in preventing prolapse of the uterus was this endoperitoneal tissue, and whether it was derived from the parametrium or from the pelvic fascia seemed to be a matter of secondary importance.

Sir WILLIAM SMYLY believed that the successful treatment of this troublesome condition depended upon a clear knowledge of its anatomy, and especially upon the restoration of the connective tissue and fascial supports; but so far as his experience had carried him, he doubted the possibility of restoring the fascia which supported the bladder, and he would still resort, at any rate in women who had passed the menopause, to interposition of the uterus between the bladder and vagina, whilst in those who were likely to have more children he had found vaginal suspension a useful compromise. With regard to the uterus itself, he had no doubt that it was maintained in its position by the strong fibrous tissue at the base of the broad ligaments.

Dr. SOLOMONS said that the number of operations required to cure prolapse depended on the conditions present. He found it necessary to perform anterior colporrhaphy, with pushing up of the bladder, high circular amputation of the cervix, shortening of the utero-sacral ligaments, posterior colporrhaphy and perinæcorrhaphy with some form of operation to cure the retroversion. It seemed to be difficult to determine whether these utero-sacral ligaments had any bearing in causing prolapse; it was certain, however, that they were strong bands which, when separated and brought in front of the uterus, acted as most efficient splints. He thought it would be well if operators who had opened the abdomen, after performing this operation, would say in what condition they found the utero-sacral ligaments. He would be glad to hear of a cure of a severe prolapse where the utero-sacral or lateral pelvic ligaments were not shortened. He did not consider the interposition operation should be done before the menopause.

Dr. GIBSON agreed with the President regarding the importance of the pelvic fascia in the support of the uterus and bladder. He believed, however, that when the fascia was ruptured and had stretched sufficiently to allow of prolapse, it could not be considered capable of preventing further prolapse when it was repaired, as the President suggested. He believed that the fascia would continue to stretch. He did not know of any cases of complete prolapse which had been cured by repairing the fascia. Neither did he believe that large cystoceles could always be cured by anterior colporrhaphy, even when the most extensive suturing of the tissues under the vaginal wall was carried out.

Sir ANDREW HORNE, Drs. ELLA WEBB, ASHE, and GOULDING also spoke.

The PRESIDENT replied.

WEST-LONDON MEDICO-CHIRURGICAL SOCIETY.

MEETING HELD JANUARY 14TH, 1916.

The President, Dr. LEONARD DOBSON, in the Chair.

THE following cases were shown:—

Dr. F. S. PALMER: (1) Functional monoplegia due to shock from bursting shell (soldier, æt. 24); (2) complete mutism and deafness due to shock from bursting shell (soldier, æt. 28), steady and uninterrupted progress under a system of re-education without hypnosis.

Major W. MCADAM ECCLES: (1) Abnormal venous channel in a male patient, dilatation of the anastomosis between the two superficial external pudic veins, with imperfect descent of the left testis. In reference to the case of caput medusæ shown by him at the clinical meeting held on November 5th, Major McAdam Eccles described the abnormal conditions, revealed by laparotomy, of some of the intra-abdominal veins. (2) and (3) Femoral hernia in a man (two cases).

Mr. O. L. ADDISON: Malignant glands of neck (male, æt. 60), almost total disappearance under massive doses of X-rays, heavily filtered, for a period of about three months, at the rate of two or three a week.

Dr. ARTHUR SAUNDERS: (1) Severe rickets and tuberculosis (male, æt. 5). (2) Subacute rheumatism, multiple nodules in occiput (temporal regions), knuckles, elbows, wrists, ankles, knees, flexor tendons of wrists, sternum, scapulæ, and vertebræ (male, æt. 11).

Mr. N. BISHOP HARMAN: (1) Case showing the effects of chronic blepharitis, said to have followed measles (male, æt. 36). This was described by Mr. Bishop Harman as being one of the worst cases of chronic blepharitis which he had ever seen. (2) Iridodialysis caused by air-gun injury (female, æt. 10).

Dr. GEORGE PERNET: (1) Ichthyosis of trunk and limbs (male, æt. 6). (2) Morphœa-scleroderma, outer sides of legs (female, æt. 14).

The following skiagrams were shown by Dr. REGINALD MORTON:—

Cases under the care of Dr. Arthur Saunders.—(1) Absorption and collapse of fourth and part of the fifth lumbar vertebræ, following para-typhoid fever (male, æt. 30). (2) Large aneurysm of the arch of the aorta, with protrusion of the sternum (two skiagrams).

Cases under the care of Mr. O. L. Addison.—(1) Myeloid sarcoma of upper ends of tibia and fibula female, æt. 43). (2) Old case of tuberculous disease of the hip-joint (male, æt. 26). (3) Large branched calculus in the pelvis, and a round calculus in the cortex of the left kidney (female, æt. 36).

Case under the care of Mr. H. S. Souttar.—Tuberculous disease of the hip-joint, with dislocation (male, æt. 8).

Case under the care of Mr. H. Tyrrell Gray.—Shrapnel bullet in side of neck, which entered in the region of the scapula of the opposite side (male, æt. 30).

Case under the care of Dr. E. D. McDougal.—Shattering of upper part of humerus by shrapnel, showing curious formation of new bone.

The President, Major W. McAdam Eccles, Dr. Arthur Saunders, Dr. Seymour Taylor, Dr. Harold H. Sanguinetti, Mr. O. L. Addison, Dr. S. D. Clippingdale, Dr. Rowland Pollock, and Dr. Reginald Morton took part in the discussion on the various cases.

LIVERPOOL MEDICAL INSTITUTION.

AT the annual meeting of this Institution, held January 20th, 1916, the following office-bearers and members of Council were elected:—President, Charles J. Macalister; Vice-Presidents, R. J. Hamilton, W. J. Fleetwood, Frank H. Barendt and Walter T. Glegg; Treasurer, Llewellyn Morgan; General Secretary, Hubert Armstrong; Secretary of Ordinary Meetings, John Hay; Secretary of Ordinary Meetings (elect), John Owen; Secretary of Pathological Meetings, Frank H. Barendt; Secretary of Pathological Meetings (elect), J. Martin Beattie; Librarian and Editor of Journal, R. W. MacKenna; Council: Reginald T. Bailey, W. Allen Daley, F. M. Gardner Medwin, Thomas Guthrie, Walter C. Oram, Claude Rundle, Gerald Wallace, Mary Birrell Davies, Frank A. G. Jeans, George W. Pollard, Joseph A. Sanderson, A. Frank Walker.

MRS. EMILY ANN WIDDOP, of Harrogate, has left the residue of her estate of £11,264 in equal shares to the Harrogate Infirmary and the Bradford Infirmary.

THE Honorary Secretaries of King Edward's Hospital Fund for London have received at the Bank of England, from the League of Mercy its contribution for the year 1915 of £14,000.

A CONVALESCENTS' military hospital has been established at Pentreffynnon Hall, a beautifully-situated mansion on the Welsh estate of Lord Mostyn, near Holywell, and there are at present about a dozen wounded soldiers there.

SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

Specially compiled for THE MEDICAL PRESS AND CIRCULAR.

The Reappearance of Menstruation after Childbirth.—Ehrenfest (*Amer. Jl. Obs.*, lxxii., 4) considers the question from observations and notes upon 209 patients in 309 births. There are numerous statistical tables, the general trend of which is to show that a debilitating influence exerted immediately by labour, and later by the loss of body fluids during lactation, with rare exceptions temporarily arrests ovulation. As soon as the disturbed equilibrium is restored, the ovary resumes its function of ovulation, and the first corpus luteum sends its specific hormone to the endometrium, and if this is normal a typical menstrual flow occurs; if it be hyperæmic from subinvolution there may be menorrhagia. If the uterus is atrophic it may require restimulation from one or more ovulations to start menstruation. The suspension of ovulation depends upon the general physical state of the woman, anything which debilitates delaying the return of menstruation, and consequently the amenorrhœic state generally lasts longer in the sick and weak woman, in the primigravida, whose labour as a rule is longer and more exhausting, and in the woman suckling a large child. In the majority of women equilibrium is regained before lactation ceases, and once menstruation reappears it generally continues regularly through lactation.

F.

Premature Separation of the Normally Implanted Placenta.—Williams (*Surg., Gyn. and Obs.*, xxi., 5) discusses the subject in the light of our knowledge up to 1911, and secondly from observations made since that date. Two cases are described, and the condition of the uteri which were removed considered. Both of the specimens showed a condition of infiltration of the muscle coats with blood and general engorgement of the tissues; the same conditions are described by numerous writers, being twenty cases collected from the past four years, and this is not exhaustive The condition has been described as hæmorrhagic infraction of the uterus. There may be numerous small ruptures of the tissues on the surface of the uterus and broad ligaments; the broad ligaments, tubes and even ovaries may be involved. The condition is not confined to the concealed type of hæmorrhage. Endometritis, so-called, has no part in the ætiology of the condition. In severe cases it is associated with profound disorganisation of the uterine muscle. The causation is said to be probably dependent upon some as yet undifferentiated form of toxæmia, which may or may not be accompanied by albuminuria. As regards treatment, radicalism is strongly advocated. Nothing is stated to be required in the mild cases, while in the severe cases measures such as plugging tend to delay the adoption of radical measures.

F.

Fate of Ovaries after Hysterectomy.—Vineburg (*Surg., Gyn. and Obs.*, xxi., 5) says the origin of ovarian internal secretion is still uncertain, although the follicles undergo various stages of development. It is not certain that the function of internal secretion continues undisturbed by the alteration in blood supply consequent upon the operation. It is still disputed as to the degree to which the climacteric syndrome is due to the removal of the ovaries or the injury to the pelvic nerves; the effect of retention of the ovaries in hysterectomies is only relative, and probably not 20 per cent. in favour of retention, and it appears as desirable after 45 years of age as before. Subsequent trouble in the ovaries does occur, and is probably much more frequent than appears from the literature. In view of the foregoing conclusions, the writer is of the opinion that the doubtful clinical advantages obtained by retaining the ovaries are more than counterbalanced by the risks, and he would therefore not retain the ovaries in any case, unless enough lower uterine segment could be left to maintain menstruation.

F.

Management of the Placental Stage of Labour.—Polak (*Surg., Gyn. and Obs.*, xxi., 5), having studied 2,000 cases during the past year which were managed without control of the fundus, found that the placenta came away without any trouble or complication. The normal mechanism is that described by Schultz. There was no case of *post partum* hæmorrhage in the out-patients, and only three amongst 694 intern patients, including all the operative procedures. The placenta was retained five times; in three it was removed by Crede's method under anæsthetic, being already detached; one was retained by a myoma, which acted as a ball valve in the lower uterine segment; the fifth was expressed after separation at the end of 96 hours. The manner of attending the third stage consists of turning the patient on her back, clamping the cord near the vulva, then waiting for signs of detachment, and then, but only then, handling the fundus and expressing the placenta when the uterus contracts. The retention of the placenta in the uterus for days is considered free from risk, provided it is either attached or completely detached, when the bleeding will be negligible. Sepsis is dependent upon the passage of the hand into the uterus through an infected vagina, and not upon the retention of the placenta. When the adhesion of the placenta is so great as to need actual digging out piecemeal of the placenta, hysterectomy should be our choice.

F.

The Intrathecal Injection of Salvarsanised Serum.—Spencer (*Birm. Med. Review*, December, 1915), records the cases of seven patients with tabes dorsalis, and five with sclerosis and interstitial cord lesions, who were treated with intrathecal injections of salvarsanised serum. The results were by no means uniform, but he has been able to draw from them the following conclusions:—The neo-salvarsan, or salvarsan injection, should be made by venepuncture to avoid the scar which results from the open operation. It is advantageous to use doubly distilled water for dissolving the drug, as the after effects of the injection when this water is used are very slight. Rigid asepsis in all manipulations is of paramount importance, as infection may be followed by disastrous consequences. A compound is probably formed in the blood between the neo-salvarsan and the serum proteins, which is strongly active against the specific organisms. The cerebro-spinal fluid rarely contains any arsenic after an intravenous injection of neo-salvarsan. Patients with symptoms of an irritative character such as lightning pains, or gastric crises, frequently suffer from an acute attack of these pains, which lasts from twelve to twenty-four hours after the injection, is easily controlled by morphia, and need cause no alarm to the physician, as the symptoms come on too soon after the injection to be due to sepsis. There is generally improvement or cure of the subjective symptoms, but no change was ever effected in the reflexes. The unsatisfactory results obtained in the patients with sclerosis and interstitial cord lesions are due to the fact that in these patients it is a matter of physical signs rather than symptoms, and therefore little improvement would be expected Several injections are probably necessary to give permanent relief to the symptoms, or to bring the active progress of the disease to an end. The method is still on probation, but from a consideration of the pathology

of the tissues involved it seems the most rational one yet introduced for the treatment of syphilitic lesions of the nervous system. The method probably will never become very popular with the profession, owing to its difficulties, dangers, and tediousness, but it is worth trying when the other treatments have failed, on account of the miserable existence led by patients suffering from tabes with any of its irritative manifestations. Relief or cure of the subjective symptoms is here a distinct gain. From a consideration of the published cases, together with the cases seen by himself, Spencer believes that the method has not given as good results as might have been expected on purely theoretical grounds, owing possibly to the extreme sensitiveness of the central nervous system to any drug or toxin, thus preventing a sufficient amount of the drug from being introduced to be entirely effective on the spirochætes. K.

Injection of Neo-Salvarsan into the Lateral Ventricle. Hammond and Sharpe (*Journ. Amer. Med. Assoc.*, December 18th, 1915), dissatisfied with the results obtained by the intradural administration of salvarsan, record their efforts to treat paresis by the injection of salvarsan directly into the lateral ventricle. In all, seven operations have been performed up to the present, and from the results of these the following conclusions are drawn:—In comparison with the deadly nature of the disease, the hazard of intradural treatment, by whatever method, is of little moment. On experimental and clinical grounds, both subdural and intraventricular methods are superior to the intraspinal route in the treatment of this disease. From an experimental and theoretical standpoint, the intraventricular method is superior to the subdural route, and it appears to be safer. The intraventricular method, with careful *technique* and a due regard for the anatomy of the brain and the delicate nature of the tissues one is invading, is, the writers believe, practically free from danger. If the freedom from unfavourable symptoms so far achieved in intraventricular injection can be maintained, it will be imperative so to treat paretics in the earliest stages, with a greater chance of improvement, and perhaps permanent arrest of symptoms. K.

Radium in Parotid Tumour.—Weil (*Journ. Amer. Med. Assoc.*, December 18th, 1915), has treated a parotid tumour of seven years' duration, presenting certain characteristic pathological features, for a period of six weeks, by the insertion of radium into the tumour. The tumour disappeared, and after an interval of almost two years presents no recurrence. K.

OBITUARY.

DR. W. F. SMARTT, L.R.C.S.I., L.A.H., BATHFORD.

THE death is announced of Dr. W. F. Smartt, of Radnor Lodge, Bathford. Six weeks ago he met with a very serious accident in Norfolk. He had given up his practice temporarily in order to do war work—he was a captain in the Royal Army Medical Corps and was stationed with a unit in Norfolk. One night, driving in a pony trap, he was run into by a heavy Army lorry, which smashed the trap to pieces and inflicted grave injuries upon Dr. Smartt. He was removed at once to a Red Cross Hospital, where he died.

Dr. William Francis Smartt, who was 54 years of age and unmarried, was a Licentiate of the Royal College of Surgeons, Ireland (1882), and a Licentiate of the Apothecaries' Hall, Dublin, spent some years in the Colonial medical service, and was Government Medical Officer for British Guiana. He went to Bathford some six or seven years ago and commenced practice.

DR. HERBERT WILLIAMS, M.D., D.P.H., LONDON.

THE death occurred on January 16th of Dr. Herbert Williams, medical officer of health for the Port of London. Following an operation last year, Dr. Williams recently underwent another for appendicitis, and succumbed finally to heart failure in his 53rd year.

Dr. Williams was known alike for his genial disposition and his scientific attainments. He was educated at London University, and received his medical training at St. Bartholomew's Hospital. He graduated M.D.London in 1890, and took the Cambridge Diploma of Public Health in 1893. In 1892 he entered the service of the City Corporation in the capacity of assistant medical officer of the Port of London Sanitary Authority, and nine years later he succeeded Dr. Collingridge as medical officer, a position which he held to the end of his life with great distinction to himself and benefit to the inhabitants of London. Dr. Williams was an enthusiastic patron of outdoor sports, and was a good golfer and oarsman. Some years ago he was a major in the 1st Kent Royal Garrison Artillery Volunteers, and during the South African War acted as adjutant to the corps.

REVIEWS OF BOOKS.

TWO USEFUL WAR BOOKS.

Two books, especially written for the purposes of the war, have just been issued, which can scarcely fail to supply a want. One is on "Bandaging" (*a*) and the other on "The Selection of the Recruit" (*b*) Each has a value of its own, for each displays an intimate knowledge of the special requirements which this war has evoked. In Mr. Fitzwilliams' work, besides the ordinary methods of bandaging in common use, other methods, but little required in civil practice, are fully described and illustrated, such as the complexities of wounds demand. In this regard an important section is that devoted to the description and uses of the triangular bandage, the scope and the utility of which in military practice is admittedly extensive. The book is essentially adapted for the information and guidance of orderlies, nurses, and others engaged in attending to wounded men. A feature of the work is the profuseness of its illustrations. It is of interest to note that the drawings were done by a Hungarian prisoner of war in Malta at the author's suggestion. The frontispiece is a caricature of the typical "Little Willie" supporting himself upon two massive crutches. The left leg from the knee downwards is thickly covered with wadding, secured by a spiral bandage; the forward position of the limb suggests the first movement of the "goose step," but further exhibition of that Teutonic imbecility is restrained by a sling extending from the foot to the back of the neck. An iron cross dangles conspicuously from a military collar. Possibly this Hungarian artist intended other impressions to be conveyed by this drawing which do not appear upon the surface. We have no hesitation in saying that this is the best book on bandaging which has come under our notice.

In Captain Begg's book the recruiting problem is discussed from a scientific standpoint. Among other things it contains much valuable statistical information dealing with anthropometrical matters. The first four chapters are devoted to the consideration of the recruit from the aspect of the various factors of age, growth, development, the causes of rejection, etc. Allusion among the latter is made to diseases of the heart, which formed the highest ratio of rejections in 1909. The author, however, does not mention cigarette smoking in this connection as the cause of cardiac disturbance, which in Army reports is referred to as materially affecting the fitness of a recruit for service. The procedure of examining recruits is next fully described and explained. The last part of the work is mainly statistical. Apart from their technical value, the author's pages cannot fail to be of interest to those whose hobby is to claim that we are a degenerating race. The surmises of these pessimists

(*a*) "A Practical Manual of Bandaging." By Duncan C. L. Fitzwilliams, F.R.C.S., Capt., R.A.M.C.T. London: Bailliere, Tindall and Cox. 1916.

(*b*) "The Selection of the Recruit." By Captain S. T. Beggs, M.B., M.D., R.A.M.C. London: Bailliere, Tindall and Cox. 1915.

are mostly based upon the recruiting statistical returns of the Army reports. It is evident, however, that the standardisation of the race cannot be gauged by the changing conditions introduced from year to year by the War Office for recruiting purposes. This book is an indispensable guide, in our opinion, for all engaged in the medical examination of recruits.

PRINCIPLES OF GENERAL PHYSIOLOGY. (*a*)

In a delightfully written preface Professor Bayliss tells us that he has spent much time in the extraction from books and original papers, many of them not biological, of material of fundamental importance in the proper treatment of physiological processes. The result of this labour is offered to others in the handsome volume before us. The work deals with "abstract" or "general" physiology rather than the "applied" physiology required by the agricultural, medical, or veterinary student. The anticipated critisicm, "What is the good of it all?" is very fully met. We are reminded that the practical value of pure abstract laboratory work is often very great. The electrical waves of Hertz were referred to in the first edition of Karl Pearson's "Grammar of Science" as of no practical application, but before the second edition appeared they were used for wireless telegraphy.

The opening chapter deals with protoplasm, and in some respects it may come as a shock to the enthusiastic microscopist to learn what a vast possibility of error centres round the use of histological reagents and microscopic vision. Subsequent chapters deal with such subjects as energetics, surface action and the colloidal state. Much of all this is exceedingly technical and several pages require a knowledge of higher mathematics for a complete understanding of them; but the author's style is so simple and graceful that the non-technical reader can easily follow all the arguments. The subject-matter of each chapter is recapitulated in a most useful summary.

The chapters on nutrition, digestion, reflex action, respiration, circulation and hormones, drugs and toxins are brimful of interest to the medical reader. In some instances he will wish that the author had added more of the practical applications, but on the other hand he will often find himself engrossed in abstruse principles in which perhaps he little suspected that he had any interest whatever.

The book is a monument of industry. There is an extensive and well-digested bibliography. There are 259 illustrations of excellent quality. They include 27 portraits of men whose researches have specially advanced knowledge of scientific subjects, and this gallery gives an added interest to an admirable book. There are also a few reproductions of great historical interest, including a copy of Leonardo da Vinci's drawing and part of his description of the vascular system. The book has a special interest to the biologist and physiologist, but we can heartily recommend it as a most interesting study to the broad-minded practitioner and as a corrective to the narrow.

Dr. R. de la Poer Beresford, Medical Officer for Oswestry and district, who has been an M.D. for 51 years, has now taken the degree of Master of Hygiene at Liverpool University.

Dr. Carter, who for the past eight years has been a member of the honorary staff of the Wolverhampton General Hospital as an assistant physician, has now been appointed an honorary physician.

Dr. Edmund Thomas, Bridgend, is the Medical Officer of the St. John auxiliary hospital which has been established at the Southerndown "Rest." Dr. Thomas has done a great deal of work on behalf of the St. John Ambulance Association in Glamorgan.

(*a*) "Principles of General Physiology." By William Maddock Bayliss, M.A., D.Sc., F.R.S., etc. Longmans, Green and Co., 1915. Royal 8vo. Price 21s net.

Medical News in Brief

City Dispensary.

The Lord Mayor, presiding at the 127th annual meeting of the City Dispensary, held on January 19th at the Dispensary, College Street, E.C., said he knew of no institution that did better work at a less expenditure of money than that dispensary. During the year there had been 15,793 attendances on the sick poor, which was a sufficient proof of the valuable work being done.

School Medical Inspection.

At a Gloucestershire County Council meeting, Mr. F. A. Hyett, chairman of the Education Committee, said the Finance Committee would present at the next meeting provisional estimates in which no sum would be provided for the continuance of medical inspection, but only for a limited scheme of dental treatment. He had thought it wise to ascertain what would be the view of the Board of Education if medical inspection were discontinued in its entirety, and what would be the grant for the dental treatment. The reply had surprised him, for the Board said that if medical inspection were discontinued, not only would they make no grant for dental treatment, but that the grant for the ordinary work of elementary education in the schools would be in danger of being diminished. The Board also told them that they were the only authority in the whole of England who proposed to discontinue medical inspection.

Anonymous Gift of £10,500 to Cardiff Hospital.

An anonymous gift of 10,000 guineas to the King Edward VII. Hospital, Cardiff, towards the cost of new extensions was announced by the hospital authorities on January 17th.

Hospital Saturday Fund's Brine Baths Home.

To the convalescent homes and sanatoria which they now own the Birmingham Hospital Saturday Fund Committee are shortly to add a brine baths home at Droitwich. Lately a specially favourable opportunity has presented itself for the acquisition of a suitable building at Droitwich, and it is probable that within a very short time the fund will have acquired a home with the accommodation for twenty-five patients, which was specially erected by a doctor for the reception of persons requiring treatment for rheumatism.

Royal College of Surgeons.

The Council of the Royal College of Surgeons have voted the sum of 50 guineas to the joint fund of the British Red Cross Society and the Order of St. John of Jerusalem. The Council have appointed Sir G. H. Makins, who is serving as consulting surgeon to the Expeditionary Forces in France, to be the next Hunterian Orator of the College.

Carnarvon Hospital for Wounded.

The Carnarvon Board of Guardians, having decided to place the Ervri Infirmary at the disposal of the War Office for the reception of convalescent troops, a special meeting of the Board took place on January 15th, when final arrangements were agreed upon. These will involve removing thirty-one patients now at the infirmary to the old workhouse hospital near by and fitting up the infirmary with thirty more beds and other requisites sufficient to accommodate a total of sixty patients. Additional nurses are also to be engaged.

£8,400 for Motor Ambulances.

At a meeting of the Federation of Master Cotton Spinners at Manchester, on 21st January, a scheme was approved under which each of the fourteen districts into which the federation is divided contribute £600 for the purchase of an ambulance car, making fourteen cars in all, at a cost of £8,400. The money will pay for the cars and twelve months' running expenses.

Serbia's Need

WE are asked to give publicity to the following:—"To avoid any possibility of confusion in the administration of contributions intended for the benefit of the distressed Serbian population, the Serbian Legation requests that subscriptions intended for the Serbian Relief Fund, of which H.M. the Queen is Patroness, should be sent to the Earl of Desart, K.C.B., at the offices of the fund, 5, Cromwell Road, South Kensington, S.W. The Serbian Legation will continue to receive subscriptions for the following Serbian Funds:—(1) The Archbishop of Belgrade's Fund for the families of the killed and wounded soldiers. (2) The Society of the Serbian Red Cross. (3) The Parliamentary Commission for the Refugees. (4) The Society of St. Helena for the orphans whose parents have been killed in the war. All contributions addressed to the Serbian Legation (195, Queen's Gate, London, S.W.) for these funds will be gratefully received and acknowledged.

Shortage in Medicine Bottles.

HOW a parent's suspicions were awakened because a doctor took away a medicine phial from which doses had been given a dying child, was revealed at Westminster Coroner's Court.

It was the shortage of glass bottles that led the doctor to take away the phial.

The Coroner said that the medicine had been carefully prepared, after examining the prescription and the phial.

Dr. Trevor, pathologist, added that at the museum at St. George's Hospital they could not get bottles except at a colossal cost.

The Coroner said he supposed the medicine bottles used to come from Germany or Austria, which would account for the difficulty in getting them.

Economy in Food.

DR. ROBT. HUTCHISON, lecturing at the Institute of Hygiene on waste in foods, said that we were spending annually more than £600,000,000 on food, and we might easily save 10 per cent. of that sum without any ill-effect on health. A large section of the community could save a good deal by eating less of everything all round, but he excepted those who work hard with their hands and growing children.

Worcester Doctors and Eligible Medical Men.

THE honorary medical staff of Worcester Infirmary have informed the committee of that institution that they decline to work with any man of military age appointed temporarily to take the place of a colleague who has joined the army.

Influenza in the United States.

ONE of the most serious epidemics of influenza ever known in the United States is described in the report of the Public Health Service. It was widely prevalent in New York, Chicago, Philadelphia, Boston, San Francisco, Seattle, Cleveland, and Detroit, the two latter cities having probably 100,000 cases.

Medical Recruiting in Ireland.

THE Secretary to the Department of Recruiting for Ireland has issued the following statement to the Press:—

Following on representations which have been made to him by the Irish Medical War Committee, the Lord Lieutenant, as Director-General of Recruiting for Ireland, has sanctioned the recognition of that Committee as the official channel of recruiting for the medical profession in Ireland.

The Committee have undertaken to give every possible assistance to the military authorities in the provision of medical officers for the army.

With this object in view, they are prepared to facilitate the release of younger members of the profession by endeavouring to provide acceptable substitutes, and if so desired, by helping to reorganise the medical service.

Members of the medical profession who wish to apply for commissions in the Army Medical Service are accordingly recommended to write, in the first instance, to the Hon. Secretary of the Committee, c.o. the British Medical Association, 16 South Frederick Street, Dublin.

Radiograph Car Fund.

FIELD-MARSHAL LORD GRENFELL will preside at a meeting at the Queen's Hall on January 27th, at which addresses in support of the Fund for Radiograph Cars at the Front will be delivered by Sir James Mackenzie Davidson, M.B., and the Hon. Arthur Stanley. The band of the Grenadier Guards will be present. There will be a procession of women workers in uniform, and Miss Muriel Foster will sing. A demonstration of X-ray machines will be given.

Health Officials and Alcohol.

THE following resolution was adopted by the medical officers of health of Nova Scotia at a conference: "Whereas it has been absolutely proven that alcohol has a pernicious and injurious effect on the public health of our country, in that it lowers the resistance of the individual to disease, thereby disposing to tuberculosis and other infectious diseases; and whereas it is one of the chief contributing factors to poverty, misery and crime; therefore we, as health officers of the Province of Nova Scotia, place ourselves on record as opposed to its use as a beverage, and strongly recommend its use only upon medical prescription."

Nursing in Derbyshire.

IN the annual report of the Chesterfield District Medical Association, it is stated that as the result of a private meeting addressed by the Duchess of Devonshire at Chesterfield, a movement has been inaugurated to transfer the headquarters of the Derby Nursing Association to Chesterfield. The object is to organise nursing in the north-eastern portion of Derbyshire upon more effective lines.

Supply of Doctors for the Army.

IN the House of Commons last week, Mr. Tennant, in reply to Mr. Lynch, said that, thanks to the patriotism of the medical profession, there was no present anxiety regarding the supply of doctors for the Army, and the Central Medical War Committee, with which the Director-General of the Army Medical Service was in touch, had carefully guarded the interests of the civil population, the claims of which had not been, and would not be, disregarded.

Society of Apothecaries of London.

THE following candidates having passed the necessary examinations, have been awarded the L.S.A. Diploma of the Society, entitling them to practise Medicine, Surgery, and Midwifery:—C. B. De Forest, D. M. Hunt, G. L. T. Lawlor, I. H. Lloyd, T. C. Russell, J. G. T. Thomas and A. J. A. Wilson.

Royal Colleges of Physicians and Surgeons, Edinburgh, and the Royal Faculty of Glasgow.

THE Examinations of the Conjoint Board for the triple qualification were concluded at Edinburgh on the 21st inst., with the following results:—

First Examination.—The following candidates passed the First Examination:—Alice Fung-a-Ling, Alexander F. Caddell, Gwilym ap Vychan Jones, William Gibb, and David Gilmour.

Physics.—Michael Quinlivan, Lizzie R. Clark, and Norman H. Mackay.

Biology.—Michael J. Quinlivan, Robert B. Forgan, William H. Kerr, and Mayberry H. Carleton.

Second Examination.—The following candidates passed the Second Examination:—Eliza J. Stuart, Thomas T. Reade, Cyril T. Casking, Andrew F. Briglmen, William B. Watson, Patabedimuhandirange M. Fernando, and George P. de Silva.

Anatomy.—Andrew B. Macdonald.

Physiology.—John K. Steel, Donald Mackay, Leo H. Peries, and David Levenstein.

Third Examination.—The following candidates

passed the Third Examination:—Spearman C. Swinburne, James H. Brown, Robert McLaren, William B. Lawson, Robert G. Battersby, Benjamin Ajaji-Young and Thomas Jackson.

Pathology.—Edward G. Jones.

Materia Medica.—Alexander B. Black, Christopher R. C. Moon and Mohammed Talaat.

Final Examination.—The following candidates, having passed the Final Examination, were admitted L.R.C.P.E., L.R.C.S.E., L.R.F.P. and S.G.:—Thomas C. MacGowan, Claud A. Slaughter, Theodore C. van Derzeil, Alexander W. McGregor, Charles K. Carroll, George L. Pillans, L.D.S., William L. Paterson, David S. Taylor, David S. Luther, and Donald S. Graham.

Medicine.—Thomas Jackson and John Bygott.

Surgery.—Robert C. Wilson Spence, Bertram C. Haller, and John E. Kitchen.

Midwifery.—Andrew Smith, junr., and John Ross.

Medical Jurisprudence.—Harry Ellison, James W. Cordon, Stanley W. Hoyland, Thomas Hardie, James S. Durward, Alexander Morrison, James V. R. Rohan, Gilbert Ll. Stanley, James Y. McLean, Edward M. L. Morgan, Reginald J. T. Malcolm-Gasper, William B. Lawson, and John G. McK. Macaulay.

MEDICAL WAR ITEMS.

HIS MAJESTY THE KING has been graciously pleased to approve of the appointment of the undermentioned officer to be Companion of the Distinguished Service Order, in recognition of his gallantry and devotion to duty in the field:—

Captain Alexander Findlater, M.D., 1st London Mounted Brigade Field Ambulance, R.A.M.C. (T.F.), for conspicuous gallantry and devotion to duty on several occasions, notably on September 29th, 1915, at Chocolate Hill, Gallipoli Peninsula. He crossed over 200 yards of open ground under very heavy shell fire to render aid to two wounded men. He saved the life of one, but the other was beyond help.

His Majesty the King has been graciously pleased to confer the Military Cross on the undermentioned officer, in recognition of his gallantry and devotion to duty in the field:—

Temp. Lieutenant John Wesley Gilbert, R.A.M.C. (attached 9th Brigade, R.G.A.), for conspicuous gallantry and devotion to duty near Ypres on December 29th, 1915. After three attempts he succeeded in entering a farm, which was being heavily shelled with gas and other shells, and rendered valuable assistance to the wounded infantry who were billeted there.

A SUPPLEMEMT to the *London Gazette* issued on 22nd January contains the following:—

Distinguished Service Cross.—The King has been graciously pleased to give orders for the award of the Distinguished Service Cross to the undermentioned officer in recognition of his services during the advance on Kut-el-Amara on the 27th and 28th September, 1915: Surgeon Dermot Loughlin, M.B., R.N. Surgeon Loughlin attended the wounded on board the *Comet* under a heavy fire at cose quarters on the night of the 28th September.

THE Supplement to the *London Gazette* contains the announcement that the following is mentioned for his services with the British Naval Mission in Serbia:—

Temporary Surgeon Edward Rowland Alworth Merewether, R.N.

COLONEL E. O. WIGHT, Assistant Director of Medical Services, who was killed in Flanders on December 19, was born on May 29, 1858. He was the youngest son of the late Dr. Robert Wight, F.R.S., East India Company's Service. Colonel Wight entered the Service in February, 1882, reached the substantive rank of lieutenant-colonel in the R.A.M.C. in 1902, and retired in March, 1907. On the formation of the Territorial Force he accepted the post of D.A.D.M.S., Home Counties Division, in which capacity he was still employed when war broke out. On mobilisation of the Home Counties Division he went with it to Maidstone, Canterbury, and Windsor. In April last he was offered the post of A.D.M.S., 49th Division, which had been ordered abroad, and he was serving in this capacity at the time of his death. Before the present war Colonel Wight saw service in the Lushai Expedition, Burma, in 1802, and was decorated with the medal with clasps. He also had the Royal Humane Society's bronze medal and two vellum testimonials from the same source, for saving lives from drowning on three different occasions. He was L.R.C.P.Edin. in 1881, M.R.C.S.Eng. in 1881, and D.P.H., R.C.P.S. Lond. 1902, and was a Fellow of the Royal Institute of Public Health. He was killed by a shell whilst assisting to extricate some of his motor ambulances from a dangerous position. One of his senior officers in writing of him says:—"He was a man who had become proverbial as one who had no fear; one of the most gallant gentlemen I have ever met, and who was an object of devotion and reverence to his own officers and men, ever setting them a fine example of duty before all; one who was beloved and respected by all ranks. All mourn him, as they have not only lost a true friend, but also a wise director and an original and clever organiser of things for their good, one whose whole heart and soul was in his work."

Captain John Victor Livingstone Grant, M.B., Royal Army Medical Corps, attached to the Warwickshire Battery (T.F.) Royal Horse Artillery, wounded while with the Army in France, was previously in practice at Edinburgh, and took his degree in the University of that city four years ago. He was formerly House Surgeon at the Victoria Hospital, Burnley. Capt. Grant joined the Army Medical Corps in September last year.

Capt. Russell Ernest Walker, M.B., Royal Army Medical Corps, attached to the 2nd Battalion Durham Light Infantry, who has been wounded while performing his medical duties in the North of France, practised in Peterborough. He qualified M.B., Ch.B. at Edinburgh in 1912.

Lieut. Matthew Arnold Swan, M.B., Royal Army Medical Corps, attached to the Royal Field Artillery, who has been wounded while performing his medical duties in the North of France, practised in North Shields before the war. He took his degrees in Edinburgh in 1901.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer not necessarily for publication, but as evidence of identity.

CONTRIBUTORS are requested kindly to send their communications, if resident in England or the Colonies, to the Editor, at the London office, 8, Henrietta Street, Strand; if resident in Ireland to the Dublin office, 29, Nassau Street, in order to save time in forwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

MEDICAL SICKNESS, ANNUITY AND LIFE ASSURANCE FRIENDLY SOCIETY.

We are asked to announce that the thirty-third annual general meeting of the members of the above Society will be held on March 28th, at 4.30 p.m., at the Society's Offices, 300, High Holborn, London. Nominations for the election of members to the Committee must be received in writing at the Society's offices one month before the date of the meeting.

J. H. (Hampstead).—Is thanked, but his communication is hardly suitable for our columns.

M.D., F.R.C.S.—The price of the drug, so largely increased during the war, is purely a trade matter. It is probably genuinely based upon the present exigencies of supply. But beyond that supposition we know not whether chemists are taking advantage of the war to increase their profits.

P. K. T. (Leeds).—The matter is discussed in the last annual report of the Registrar General.

JUVENILE CRIME.

MR. SYDNEY EDRIDGE, magistrates' clerk at Croydon, reports that an increase of crime among juveniles synchronises with the conversion of day schools into hospitals and consequent placing of scholars on half-time; also owing to so many men being with the colours there is an absence from the homes of wholesome influence.

KLAXON (Brixton, S.W.).—Fifteen deaths attributable to vehicles in the street occurred in London during the week ended January 15th.

MORE SPIRITS DRUNK.

DURING November, 919,000 proof gallons of spirits were cleared in London, as compared with 810,000 gallons in November, 1914. The total for the eleven months ended November 3rd, 1915, was 8,272,000 gallons.

TUDOR (Mansfield).—We observe that, as a result of the first week's operations under the Order making compulsory the notification of measles as an infectious disease, no fewer than 271 cases were reported in Nottingham.

THE FRENCH MEDICAL PROFESSION AND THE WAR.

IN an address before the Paris Surgical Society, Professor Tuffier said that of the 14,000 surgeons in the army, 6,500 were at the front. Of these, 93 had been killed, 260 wounded and 441 missing; 135 had been mentioned in orders for gallant conduct on the battlefield.

Meetings of the Societies, Lectures, &c.

THURSDAY, JANUARY 27TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF NEUROLOGY) 1, Wimpole Street, W.).—8.30 p.m.: The Special Discussion on the "Functional Neuroses caused by Shell Shock without Visible Signs of Injury" will be continued. The chair will be taken by the President (Dr. James Taylor), and Dr. Batten, Dr. Farquhar Buzzard, Dr. J. S. Collier, Dr. E. G. Fearnsides, Dr. Wilfred Harris, and Dr. Campbell Thomson will speak.

Members wishing to take part in the discussion should communicate at once with Dr. Hinds Howell, 145, Harley Street, W.

FRIDAY, JANUARY 28TH.

ROYAL SOCIETY OF MEDICINE (SECTION FOR THE STUDY OF DISEASES OF CHILDREN) (1, Wimpole Street, W.).—4.30 p.m.: Cases: Mr. Sydney Stephenson: Dyspituitarism in a Girl of 15 years. Dr. J. D. Rolleston: Transient Hemiplegia in Diphtheria with Lesions of the Finger-nails. Dr. J. L. Bunch: Papillomatous Growth in a Scar. Dr. Eric Pritchard: (?) Cerebral Tumour in a Child. Dr. C. O. Hawthorne: Double Optic Neuritis. Specimens: Dr. E. C. Williams: Heart showing Infiltration by Large Round-celled Sarcoma. Miss M. B. Stogden and Miss J. H. Younger (introduced by Dr. Eric Pritchard): Congenital Double Hydro-ureter. Short Paper: Dr. J. Porter Parkinson: Nephritis without Albuminuria.

WEDNESDAY, FEBRUARY 2ND.

HUNTERIAN SOCIETY (Guy's Hospital, London Bridge, S.E.).—4 p.m.: Clinical Afternoon. Cases of Clinical Interest will be shown by, or for, members of the staff of Guy's Hospital.

Vacancies.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Barrow-in-Furness (Lancaster), Staplehurst (Kent).

Royal Albert Edward Infirmary and Dispensary, Wigan.—A Lady House Surgeon. Salary £150 per annum, with board, apartments, and washing. Applications to L. E. Mapei, Acting Secretary.

Birmingham General Dispensary.—Resident Medical Officer. Salary £250 per annum, with furnished apartments, fire, lights, and attendance. Applications to Ernest W. Forrest, Secretary, 32, Union Street.

Borough Hospital, Birkenhead.—Junior House Surgeon. Salary £180 per annum, with board and laundry. Applications to the Secretary.

North Ormesby Hospital, Middlesbrough.—House Surgeon. Salary £150 per annum, with board, residence, and laundry. Applications to Arthur Williams, Secretary.

Bury Infirmary.—Senior House Surgeon. Salary £250 per annum, with board, residence, and washing. Applications to the Honorary Secretary, Infirmary, Bury, Lancs.

The Victoria Hospital for Children, Tite Street, Chelsea, S.W.—Senior Resident Medical Officer. Salary £250 per annum, with board, lodging, and washing. Applications to the Secretary.

Warneford General Hospital, Leamington Spa.—Resident Medical Officer. Salary £150 per annum, with board, residence, and laundry. Applications to Fred Smith, House Governor.

Appointments.

BLAIR, C. E., M.B., Resident Physician at the Edinburgh Royal Infirmary.

BURNET, J., M.D.Edin., Certifying Surgeon under the Factory and Workshop Acts for the Edinburgh, South District of the county of Edinburgh.

FERGUSON, H. F., M.B., Ch.B.Edin., Resident Physician at the Edinburgh Royal Infirmary.

MALCOLM-SMITH, G. L., Clinical Assistant at the Edinburgh Royal Infirmary.

PURNELL, CHARLOTTE, M.B., B.S.Durh., Senior House Surgeon at the Bolton Infirmary.

SLOAN, SAMUEL, M.D.Glas., Examiner in Midwifery and Diseases of Women to the University of Glasgow.

Births.

ANDERSON.—On January 18th, at Newholme, Pitlochry, the wife of John Anderson, M.B., C.M., Edinburgh, of a daughter.

BOYS STONES.—On January 13th, at Knutsford, Cheshire, the wife of W. Boys Stones, B.C., etc., of a son.

CANNEY.—On January 17th, at 60, St. Andrew's Street, Cambridge, the wife of J. R. Campbell Canney, M.D., B.C., Capt., R.A.M.C., T.F., of a son (prematurely).

HENSON.—On January 19th, at Normanton, Yorks, the wife of P. H. Henson (M.B., B.S.Lond.), of a son.

LEGG.—On January 18th, at 71, Lessingham Avenue, Tooting Graveney, the wife of Cyrus Legg, M.R.C.S.Eng., L.R.C.P.Lond., of a son.

MENNELL.—On January 21, at 1, Royal Crescent, W., to Dr. and Mrs. James Beaver Mennell—a son.

POPE.—On January 17th, at 54, Eversfield Place, St. Leonards-on-Sea, the wife of Charles A. W. Pope, M.B., Lieut. R.A.M.C., of a daughter.

Marriages.

BROOKES—POWELL-JONES.—On January 19th, at the Parish Church, Hampstead, Lt. Arthur Stanley Brookes, R.A.M.C., only son of Mr. and Mrs. Albert D. Brookes, of 29, Apsley Road, Clifton, Bristol, to Gertrude Mabel Powell-Jones, daughter of Mrs. Powell-Jones, of Durley, The Avenue, Surbiton, and the late Morgan Powell-Jones, J.P., of Pwll Court, Crickhowell, Breconshire.

CLOUGH—TOPHAM.—On January 18th, at Halifax, Yorks, James Arthur Clough, M.B. (Lond.), L.S.A., West African Medical Staff, Deputy Principal Medical Officer, Nigeria, to Dorothy Elizabeth, only daughter of the late Dr. A. S. Topham and Mrs. Topham, of Braemar, Huddersfield Road, Halifax.

CUMMINS—MELVILLE.—On January 15th, at All Saints, Colville Gardens, Staff Surgeon Arthur D. C. Cummins, R.N., H.M.S. Orion, son of Walter Cummins, Esq., of Cork, Ireland, to Sheelah, younger daughter of the late Samuel and of Mrs. Melville, of 41, Colville Gardens, W.

HODGSON—LAIDLER.—On January 18th, at St. Jude's Church, Bradford, Capt. Gordon A. Hodgson, R.A.M.C., son of the late Edwin Hodgson, Manningham, to Marion Unthank, eldest daughter of Francis Laidler, Esq., of Marlborough Road, Bradford.

LLOYD—WATHEN.—On January 19th, at St. Michael and All Angels, Kingstone, William Frank Lloyd, Lieut., R.A.M.C., eldest son of Mr. and Mrs. W. Garrold Lloyd, of Oaklands, Hereford, to Margaret Wathen, younger daughter of the late T. W. Wathen, of Bridge Court, Herefordshire.

MILLIGAN—MOORE.—On January 15th, at St. Ann's, Highgate, E. T. Campbell Milligan, Capt., R.A.M.C., only son of Mrs. and the late Mr. E. Milligan, Ballarat, Victoria, Australia, to Josie Sarah, younger daughter of the late Philip Moore and Mrs. Moore, of Moorlands, Hay, New South Wales.

WATKIN—RICHARDS.—On January 18th, at All Saints, Margaret Street, W., Arthur Christopher Watkin, Capt., R.A.M.C. (T.F.), to Annie Eileen Wynn, eldest daughter of the Rev. W. L. and Mrs. Richards, of Llangniew Rectory, Welshpool.

Deaths.

MACILWAINE.—On January 19th, at Clevedon, Somerset, Sydney Wilson MacIlwaine, M.R.C.S., L.R.C.P. (late of Redhill), aged 61.

PRICHARD.—On January 11th, at 3, Malden Road, Watford, of pneumonia, Arthur Heaword Prichard, Surgeon, R.N., retired, aged 39 years.

WILLIAMS.—On January 16th, 1916, Herbert Williams, M.D.Lond., of 7, Ulundi Road, Blackheath, Medical Officer of Health for the Port of London.

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"SALUS POPULI SUPREMA LEX"

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AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."— BEAUMARCHAIS.

Wounded and After.

ON the question of the after-treatment of wounded and otherwise invalided soldiers, both Professor Sherrington and Sir Frederick Milner have recently had some pertinent remarks to make. It seems that once a man leaves hospital he is officially regarded as cured, and is at once treated as though he were fit for duty; not light duty at home, but strenuous duty at the front. The War Office is apparently unable to realise that although a man be healed of his wounds, his general condition may be such as altogether to unfit him for serious military work. The result is that such men are sent out to the front, only to break down again; thus becoming a source of anxiety to the medical officers and a nuisance to the military. As Professor Sherrington puts it, "The State is burdening beyond all limits of endurance backs in many cases already broken." How is it that a due period of convalescence is not insisted upon in these cases? On grounds of economy alone, to say nothing of grounds of humanity, such a course is the only proper one. It is a long time since 'bus companies and others found that it did not pay to treat their animals badly.

A Case with Comments.

SIR FREDERICK MILNER tells the story of a man who was invalided home from the trenches (with what, does not appear) and was sent to hospital. When discharged from hospital he still felt ill, and begged the authorities to release him. He was a skilled artisan, and his late employer, who wanted him for munition work, backed the petition. It was all to no purpose; the plea of invalidism and the support of the former employer were peremptorily swept aside, and the man was ordered to Egypt, where he now lies in hospital. As Sir Frederick Milner very properly points out, not only are this man's services as a fighting man lost to the country, and his services as a munition worker at home, but he now becomes a burden on the taxpayer for an indefinite period. I cannot help feeling that the medical part in this drama must have been rather unsympathetically played. The R.A.M.C. officers are naturally on the look-out for malingerers, and properly give them short shrift, but there is a wide difference between malingering and tardy convalescence. Moreover, it is right that the quality of a man's nervous system should be taken into account. Many of those now under arms are unaccustomed to a military atmosphere, and dislike fighting; they are soldiers only from a sense of duty, and there ought to be some sympathetic discrimination between those who are "thin red 'eroes" from choice, and those who have become so from patriotic necessity. The position of the medical man is, however, a difficult one, and he has probably learnt by experience that it is better to err on the side of severity. It might, however, be well to remind him that by no means all of those who to-day serve in the ranks enjoy the robustious nervous system of the ordinary Tommy.

Professor Sherrington.

PROF. CHARLES SCOTT SHERRINGTON, who has held the Waynflete Chair of Physiology at Oxford since 1913, is one of the most brilliant of the coterie of British physiologists who have recently won so much fame in the world of science. The value of his contributions to the study of the brain and nervous system has been officially recognised in all civilised countries. He is a graduate of Cambridge, where he took his M.B. in 1885 and his M.D. in 1892 (Caius). He is now a F.R.S. and LL.D. of several universities. He was at one time Lecturer on Physiology at St. Thomas's Hospital, and later on Professor of Physiology at the University of Liverpool. He is by no means a mere laboratory man, unacquainted with public affairs, for he has served on a Home Office Committee on the Lighting of Factories and on a Board of Trade Committee on Sight Tests. He is therefore eminently entitled to be heard on the subject now under discussion.

Sir Frederick Milner and Another.

SIR FREDERICK MILNER, Seventh Baronet, is a member of the Privy Council. He has twice sat in Parliament, for York from 1883-85, and for the Bassetlaw Division of Notts from 1890-1906. He belongs to the type once described as having "Eton and Christ Church written all over him." He has taken a very prominent part in all movements for the after-care of the sick and wounded since the war began. Sir

Frederick Milner is no relation to Lord Milner, once known as Sir Alfred Milner. The last-named was at Oxford, where he was a first-class classic, but not at Eton. He was for some time the sub-editor of the *Pall Mall Gazette*, and then sprang into fame as the Governor of the Cape during the events which preceded the Boer War. He is the son of a medical man.

Recruiting Examiners.

I CONTINUE to receive complaints on a subject which I have already mentioned—namely, the behaviour of medical examiners of recruits in the face of certificates brought by candidates from their own medical men. It is obviously unwise of examiners if they treat such certificates as necessarily useless. This seems certainly to have occurred in some instances, but I cannot believe that it is the usual practice. A great deal must depend upon how the certificate is worded. A document stating that in the opinion of the writer Mr. John Jones is unfit for military service must obviously be valueless to an examiner upon whom rests the responsibility of accepting or rejecting an applicant. But a certificate which gives cogent reasons for the opinion, and thus calls the examiner's attention to points in the case which might easily escape a hurried examination, ought certainly to be treated with respect, and if the signatory is a reputable medical man, I imagine it would be—but not always, I fear.

Certificates.

IT has, of course, been suggested that doctors give certificates "out of kindness," and the *Daily Graphic* says that if the examiner finds that this is being done "he can report the matter to the British Medical Association." Of course he can. He can also report the matter to the Upper Tooting Bicycle Club. The one course would be as impressive and as efficacious as the other. If, however, it were reported to the General Medical Council, and that body were to regard such behaviour as "infamous in a professional sense," the consequences would be very serious. According to the *Daily Graphic* the present state of matters is as follows: "Unless a man is obviously unfit he is not rejected under the Derby scheme. He is put into his group. Then on the day he is called up he is given a warrant and sent to the depot, where he is examined by the Medical Board. The Medical Board may find him fit for foreign service, or for garrison duty at home, or for clerical or other sedentary work in the Army; or it may find him unfit for any military service. In the last case he will be discharged, but in any of the other cases he will be treated for service according to the finding of the Medical Board." I feel sure that a carefully worded medical certificate presented to such a board would receive every consideration. But it should be carefully worded.

Dodging the Examiner.

A LETTER which recently appeared in the *Daily Express*, signed by Maurice Arnold, is not without interest in this connection. It is entitled "Dodging the Army Doctor." "As a contrast to the patriotic endeavour to hide any little defect from the eagle eye of the examining medico is the great anxiety displayed by a certain class of young men (?) to inform the doctor of various past ailments, which in some cases are the deciding point which grants a certificate of unfitness. One youth recently was doubly successful in his desires—rejected by the Army doctor and passed as a first-class life by an insurance company's M.D." The astonishing thing to me is that anyone who wants to "slack or funk" should take the trouble to "dodge" the Army doctor. All such a person has to do is to raise his right hand to the heavens and, blubbering, affirm that he has a conscientious objection to being wounded or even vaccinated. He would then escape scot free. How a male Government in a time of crisis can have any truck with such pusillanimous tomfoolery passes comprehension. Even in the face of the enemy we continue to be governed by the precepts of old maids and the cowardly casuistry of the castrates.

Campaign against Tubercle.

DR. WILLIAMSON, the Medical Officer of Health, and Dr. Guy, the Tuberculosis Officer, of the city of Edinburgh, have recently been expressing some very decided and rather iconoclastic opinions on the way in which money is spent in the campaign against tuberculosis. The views of these gentlemen demand very serious consideration, not only in Edinburgh, but all over the country. Dr. Williamson, at a recent health congress, said that sanatoria and dispensaries, while useful aids in carrying on a general crusade against consumption, "are not of themselves likely to be attended by markedly beneficial results in the absence of other definite preventive measures." These, he said, centre largely on the housing question. Dr. Guy, in his latest report to the Burgh Insurance Committee, said: "The housing question is one of the vital points in dealing with the problem of tuberculosis. Hitherto we have heard a great deal about sanatoria, etc., and too little about these houses. The disease should be attacked there; and my opinion inclines to the belief that if all the money which is at present being poured out on sanatoria had been spent on an improvement of housing conditions, the results would certainly not have been less satisfactory."

It is certain that every trained hygienist will agree with these opinions, and it would be a good thing if similar officers in other localities would continue the crusade on these lines. SINAPIS.

MR. CORNELIUS SURGEY, of Hounslow, bequeathed £5,000 each to the Metropolitan Convalescent Institution, 32 Sackville Street; the Home for the Dying, North Side, Clapham Common; St. Mary's Hospital, Paddington; the Freidenheim Hospital and Home of Peace for the Dying, Swiss Cottage; the Hospital for Sick Children, Great Ormond Street; and £1,000 each to the Trained Nurses Annuity Fund; the Cottage Hospital at Harlington; the Hospital at Hounslow.

THE X-ray equipment of the No. 1 Canadian Hospital at the front is now being utilised in experiments directed towards the cure of frozen feet, and surgeons believe the experiments will prove to be a success.

PERISTALTIC PERSUASION.

The paper read before the Balneological and Climatological Section of the Royal Society of Medicine by Dr. Campbell McClure, which appears in another column deals with matters which concern not only the hydrologist, but every thinking practitioner of our art. The work already done by Dr. Campbell McClure in conjunction with Drs. Mitchell and Wethered, showing that the stomach could be made to contract by gentle stimulation of the skin over the left costal margin, had broken fresh ground and prepared the way for further developments. These developments were hastened by Professor Keith's Cavendish Lecture, in which were described the various motors of the intestinal tract and the connection of these "nodal" areas with the probable causes of intestinal stasis. The next step was to ascertain if there were any areas in the abdominal integument by stimulating which an effect upon the intestinal nodal areas could be produced which was similar to the effect produced upon the stomach through the area about the left costal margin. The answer to this inquiry has been in the affirmative, and the road to further investigations is thus opened up in an atmosphere full of promise. Much still remains to be done, but with the principle firmly established, the details ought not to present any insuperable difficulties.

The treatment of intestinal stasis thus passes from the empirical to the scientific, from the exhibition of drugs to the education of reflexes. For there can be little doubt that in dealing with these nodal areas and their *modus operandi* we are in the presence of reflexes which, when seriously interfered with, lead to intestinal stasis. The interference may have been voluntary or involuntary; involuntary as the result of disordered function elsewhere; voluntary in the suppression of unseasonable and untimely defæcation which civilised conditions necessarily impose. In a paper written many years ago entitled "Was Luigi Cornaro Right?" the late Mr. Van Someren, of Venice, pointed out that we had lost or abolished a pharyngeal reflex which, when re-educated, prevented us from swallowing food until, by mastication and insalivation, it had been rendered fluid and tasteless. How we came to lose this reflex was not explained, but it is not difficult to imagine that the haste of competitive existence would not allow of the leisurely mastication upon which the integrity of the reflex depends. That particular reflex was inhibitory, the reflexes which Professor Keith described lower down in the tract are for the most part activating. It is probable that some of the constipation from which so many members of civilised communities suffer is caused by the over-education of the mechanism by which these reflexes are controlled. A proper control is essential in civilised life, and from the fact that it is so early acquired by human beings, we must suppose it to be easily acquired. Nor is it difficult to believe that necessity and force of habit may lead to the controlling action becoming so predominant as finally to suppress the action of the reflex itself. If this be the explanation, then the problem which therapists have to solve is that of the best and simplest means of re-educating these smothered reflexes. That one way of doing this is to stimulate certain cutaneous areas by gentle rubbing with the finger, Dr. McClure has shown, but, as Dr. Campbell Thomson pointed out, there remain at least two problems which this suggestive paper leaves open to future determination. One of these is the best means of applying the stimulation; the other, the precise areas which must be stimulated in order with certainty to excite the various reflexes.

Apathy of the various abdominal organs; the dilated stomach, the sluggish liver, the visceroptosis, the V-shaped colon, the splanchnic venosity, have occupied a very large place in our clinical nomenclature, our pathological explanations and our surgical excursions, for many years past; and voluminous is the literature which deals with the avoidance and correction of these troubles. A very large proportion of the invalids who crowded to the Teutonic spas before the war were patients of this type—Carlsbad, Marienbad, Kissingen and Homburg drew their clients almost exclusively from the abdominally opulent—and if it can be shown that a little peristaltic persuasion practised at home will afford a more certain relief to such people than a severe course at one of these resorts, the enemy will have good cause to deplore the scientific activity in this country which has managed to pursue its path in spite of the prevailing frightfulness.

But peristaltic persuasion, fascinating as it is in theory and facile in practice, must not be allowed to blind us to the importance of the skeletal muscles of the abdominal wall in the causation and maintenance of intestinal stasis. Visceroptosis has a very real existence, and dislocation of the abdominal viscera is just as potent a disturber of function as dislocation elsewhere. No one who is in the habit of palpating the abdomen (since the advent of appendicitis what patient escapes it?) can fail to be struck with the flaccidity and atrophy of the muscles composing the anterior wall in the vast majority of cases. The re-education of these muscles is an essential feature in any scheme for a *restitutio ad integrum* of the dislocated and disordered, viscera. And it is more than likely that a well-developed anterior wall will prove a more efficient conductor of the persuasive stimulus than one which is flaccid and inert. The present-day practice of prescribing supporting belts is admissible only if the belt is regarded as a crutch to remedy and support the prolapsed organs while the muscles are being re-educated to do their work. As additional supports to the rehabilitated muscles in elderly men and in women stretched by repeated pregnancies, the belt may certainly be allowed an honourable place; but even so, the development of the muscles themselves should not be neglected. Peristaltic persuasion then, good as it now is, and much better as it promises to be as the result of Dr. Campbell McClure's paper, must not be regarded, even in its own field, as constituting all the law and the prophets.

CURRENT TOPICS.

Tuberculosis and Field or Sea Service.

DR. BANKS, tuberculosis officer of the city of Aberdeen, has submitted a report to the Sanatorium Benefit Committee of the Burgh Insurance Committee regarding insured tuberculous persons formerly in receipt of sanatorium benefit who have joined the military or naval forces. The total number of such persons on January 12th, 1916, was 64, of whom 57 were on military and seven on naval service (minesweeping). Of these 58 were suffering from the pulmonary type of the disease, of which 34 had received sanatorium or hospital treatment for various periods.

Of the 64 tuberculous persons who enlisted, 19 have recently been on active service—14 at the western front and five on minesweepers. Of the 14 four were cases of neck gland and 10 of pulmonary tuberculosis; of the latter of whom four were in the third stage and six in the second stage: three were known to have had tubercle bacilli in the sputum. At least two of the five on minesweepers had bacilli in the sputum. Among the six discharged from service there was one who enlisted no fewer than three times before being finally discharged. None of the six had seen active service. This group does not include three who, having been discharged from one branch of the service, enlisted in another. Having in view the fact that only one of 14 men accepted for foreign service has broken down in health, and that only temporarily, Dr. Banks says we may fairly conclude that the conditions of life in the field are not unfavourable to the maintenance of the general health of the tuberculous patient, if the disease is not already too far advanced and active. The common belief that a great risk to health inevitably follows a continued exposure to the rigours of winter is not corroborated by the experience of these tuberculous soldiers. Indeed, it suggests that any risk that may exist is more than counterbalanced by the general influence for good which attends a life constantly led in the open air.

Veterinary Science.

THE steady growth and development of veterinary medicine is to be welcomed, not only for itself as a matter of utility, or as an abstract science, but also for its possibilities with reference to disease in the human species. In this department, pathology is perhaps that branch which at the moment appears to open up the widest vista, the comparison of lesions found in the human type with those occurring in the lower animals being of the greatest interest and value. In matters bacteriological and veterinary, at present we stand but upon the threshold—but it is not unreasonable to conceive that the study of infection in man and in the animal, by proceeding side by side, might throw much light one upon another, and come to be a source of mutual strength and progress. Much, if not all, of human physiology has been based upon the accurate study of animal function; if the same laws apply in health, as found by experimental investigation, why not in disease, if we but study the phenomena closely? And in the matter of therapeutics, much experimental work might be done upon animals with a justification which similar procedures in the case of man would lack. Veterinary medicine is replete with possibilities, and in addition at the moment the profession is not overcrowded, so far as we are aware.

The General Practitioner.

EARLY specialisation, in the main, is the desideratum of the medical graduate of ability; even prior to qualification, his intentions are frequently already settled, and upon graduating, he hastens to some centre where special study is made of that branch which he proposes to follow. Without denying the necessity of the exclusive worker, we think that of recent years there may have been a slight tendency to overdo specialisation, and that the slow elimination of the general practitioner is perhaps a questionable benefit. There is much to be said for the family doctor, whose interest in his clients commences with their birth, continues during their infancy and childhood,. with the ailments peculiar thereto, to cease only perhaps in advanced adolescence. Moreover, all medical knowledge is largely interdependent, and there are few circumstances with which a doctor may be confronted wherein a broad knowledge of practice, apart from the immediate question in hand, may not be of benefit. The pathologist, for example, seated in his laboratory, forms an ampler judgment of morbid anatomy and its activities, if he understands the clinical conditions associated with each lesion. So far from believing that specialisation should ensue practically immediately upon taking a degree, we venture to think that a few years' general practice would form a firm basis upon which to build, and that experience of the three great subdivisions of medicine are no handicap, but an adjunct to successful work in a more limited field.

The New French Infantry Shield.

AT a recent meeting of the Reunion Medico-Chirurgicale of the Eighth Army, Dr. Noel Fressinger showed one of the new infantry steel helmets in use in the French Army. It had been perforated by a fragment of shell, and the members present were able to note *de visu* that the fragment had deviated owing to the resistance of the metal. Only a slight skin wound of the temporal region had been produced in this case, whereas, but for the helmet, the wound would have been penetrating.

There is no doubt that these helmets render very practical service, and the question arises whether they ought not to be adopted in the British Army. Dr. Bonnette suggested that the heart ought also to be protected, and stated that a steel plate 5 millimetres thick was sufficient to stop a revolver bullet fired from a distance of 7 metres. From a practical point of view, a thickness of 4 millimetres would be sufficient to protect the heart from the majority of modern projectiles. A plate measuring 15 by 15 centimetres, weighing 200 grammes, and

slightly arched so as to fit closely on the chest, fixed between the cloth and lining of the tunic, would serve the purpose.

Professor Laurent, of Brussels, approved warmly the idea, for he said he had come across quite a number of cases in which soldiers had been preserved from death by some metallic object worn over the region of the heart.

The Destruction of Body Parasites.

A simple method for destroying body lice has been proposed by Dr. Molle, Captain in the French Medical Service. Lice are lodged in the clothing, and Dr. Molle advocates ironing the clothing and underlinen with a hot iron. The method has been used with great success. An ordinary flat iron is moderately heated, and all the clothing is carefully and thoroughly ironed. For the body linen, simply passing the iron over it is sufficient to destroy the parasites and nits. For the clothes, care must be taken to pass the iron several times over the seams and to use the iron rather hotter.

Improved Methods of Drainage in Surgery

Dr. Chaput has now for some months past quite given up the use of ordinary tubular drains, and uses "filiform" drains. The latter, it seems, act much better than the tubes, recovery being more rapid and scars insignificant. He uses threads of varying thickness, according to the cavity to be drained. For chronic abscess, where as small a scar as possible is desired, he makes use of capillary drainage (horse-hair); in abscesses the size of the fist he uses "filform" drainage (silk thread or rubber threads about 3 millimetres in diameter); for large cavities he uses cylindrical drainage (rubber cylinders from 6 to 7 millimetres in diameter). He presented several patients thus treated at the Society of Surgery, amongst others being cases of acute sub-maxillary abscess, chronic abscess of the buttock, empyema, frontal sinusitis, acute abscess of the neck.

Meningococcus Carriers.

Modern doctrines of the epidemiology of cerebro-spinal meningitis leave the practical problem of dealing with infection in a very difficult position. If it be true, as is suggested, that during the period of an epidemic an indefinite number of the general population, up to ten per cent., according to some authorities, are infected by the presence of the meningococcus in the naso-pharynx, it is clear that no general scheme of isolation of such infected and infective persons is feasible. It is, moreover, peculiarly unfortunate that no ready means of distinguishing the meningococcus is as yet available. As a matter of fact, it is a matter of extreme difficulty to establish the identity of a suspicious organism found in the naso-pharynx, either positively as the meningococcus or negatively. Hardly one of the ordinary tests is constant, and, prior to to their application, it is usually necessary to isolate the suspected organism, an undertaking which in itself may require considerable time. In view of this difficulty of identifying the meningococcus, we may be sceptical in regard to the source of the more generous estimates of its frequency. There is, however, more attention and research being devoted to the subject at present than at any previous time, and we may hope shortly to possess a more adequate knowledge of this interesting disease and the methods by which infection is carried.

War Substitutes.

The cutting off of our supplies of chemicals and surgical instruments ordinarily obtained from Germany has given a great opportunity to English manufacturers. In many cases the opportunity has been seized, and British houses are turning out articles which are entirely satisfactory, and should be able to hold their own in open competition when normal conditions return. On the other hand, certain dishonest people are attempting to seize the advantage of a temporary market by producing articles which can hardly be considered as other than forgeries of the well-known articles whose names they bear. They are in appearance deliberate imitations of valuable articles, and it is only by sad experience one learns the difference in quality. Hypodermic syringes, for example, made to look like certain old favourites of German origin, are found by the test of a boiling or two to have been made of glass which crumbles on heating. Again, drugs and medicinal preparations long used and valued, are suddenly found to be without virtue. The ingenious people who are playing these tricks are not merely robbing their customers —that will soon right itself—but they are giving British manufacturers such a bad name that they are severely handicapping those makers who are producing honest work.

PERSONAL.

Dr. J. J. O'Sullivan has been elected Mayor of Waterford.

Dr. W. H. Thompson aas been re-elected King's Professor of the Institutes of Medicine in the School of Physic, Trinity College, Dublin.

Dr. W. H. Coupland, Senior Assistant Medical Officer to the Royal Albert Institute for the Feeble-minded, Lancaster, has been elected Medical Superintendent of that Institution, *vice* Dr. Archibald Douglas, deceased.

Dr. Cowen, the Poor-law Medical Officer for New Malden, has asked the Kingston-on-Thames Guardians to appoint his sister-in-law, Dr. Lucy Beatrice Harvey, as his deputy during his partner's absence in the R.A.M.C.

Sir George Pilkington, formerly M.P. for Southport, whose death is announced, was a medical man. After studying at Guy's Hospital, he qualified M.R.C.S. and L.S.A. in 1870, and for some years practised in Southport.

In his quarterly medical report to the Essex County Council, Dr. J. C. Thresh, County Medical Officer, writes:—"I regret to have to record the death of Dr. Argles, Medical Officer of Health for Wanstead. I had known him for about 25 years, and always found him a most conscientious worker and one of the most charming of men. By his death the public health medical service suffers a real loss."

ORIGINAL PAPERS.

THE HYDROLOGICAL TREATMENT OF GASTRO-INTESTINAL STASIS.*

By JAMES CAMPBELL McCLURE, M.D.,

Physician to the French Hospital in London, and to the Hospital for Consumption, Margaret Street.

GENTLEMEN,—I feel that some apology is due to you for the fact that although this paper bears the title of "The Hydrological Treatment of Gastro-intestinal Stasis," I intend to dwell at some length on the causation of intestinal stasis, and to limit my remarks on hydrological treatment to a somewhat small compass—having regard, in this connection, to principles rather than to detail. I feel that it would be presumption on my part to do otherwise, as I am addressing an audience of men who for the most part have devoted many years to the practice and study of hydrology. At the same time, an onlooker like myself has certain advantages which distance lends in the estimation of perspective. I make no excuse for re-opening the subject of alimentary stasis, since the recent work of Keith and Alvarez has excited general interest in this much-argued question.

Before going further, I should like to state definitely what I mean by gastro-intestinal stasis. One naturally excludes cases in which delay in the passage of the gastro-intestinal contents is due to an actual obstruction in the stomach or bowel caused by a tumour or a cicatricial contraction. The type of stasis that we are considering is associated with an atonic condition of the alimentary tract, and delay in the passage of the contents occurs at certain points—namely, the stomach, the duodenum, the ileo-cæcal region, and the colon. I include the stomach because the consideration of stasis of a functional kind in this organ has been neglected, while too much stress has been laid on the intestinal condition. It is a well-known fact that ileal stasis may be either the cause or the effect of stasis higher up in the gastro-intestinal tract, and it is my experience that in a large number of cases of alimentary stasis a dilated and atonic stomach has to be dealt with before the intestinal condition can be ameliorated. It is well also to establish some sort of standard of alimentary stasis which is pathological, and I think it is right to consider that if one finds splashing on succussion, with some evidence of gastric enlargement, three and a half hours after food, there is definite evidence of gastric stasis. Similarly, if a bismuth meal be given, and has not left the stomach entirely at the end of four hours, gastric stasis is certainly present. It is my habit also to consider that if the ileum is not empty eight or nine hours after the ingestion of an opaque meal, or if most of the meal is not in the descending colon twenty-four hours after its ingestion, a state of true intestinal stasis exists.

The two most important theories regarding the causation of alimentary stasis which have been advanced are those of Arbuthnot Lane and Keith. One can, I think, without offence, describe Arbuthnot Lane's view as the extreme surgical view: he considers that stasis is produced by the dragging of an atonic bowel on firm peritoneal bands, with the subsequent formation of kinks, which cause obstruction to the passage of the gastro-intestinal contents. The great objection to this theory is that neither on *post mortem* examination, nor on the operating table, nor on the X-ray plate, has ever been found an occlusion at the point of kinking, and no evidence has been produced of a dilatation or hypertrophy of the bowel behind the kink such as one would reasonably expect to find were the kinking sufficiently obstructive to cause serious delay in the passage of the intestinal contents for a long time.

Keith's theory is quite different. In the Cavendish lecture for 1915, and in a paper read before the X-ray Section of this Society on October 15th, 1915, he put forward the theory that alimentary stasis was due primarily to a defect of innervation, and said that he found that in the course of the gastro-intestinal tract there were definite aggregations of myenteric plexus situated at certain points in the stomach and intestine. The aggregations of myenteric plexus are found at the œsophageo-cardiac junction, at the pylorus, in the third part of the duodenum, at the jejuno-iliac junction, at the lower end of the ileum, and in the distal colon. These areas he called nodal areas, and he explained that their chief function was to regulate the rhythm of contractions in the segment of the gastro-intestinal tract immediately beyond them. He also drew attention to the fact that disturbance of the rhythm of contraction in one nodal zone affects the rhythm in other zones. For instance, if the rhythm were upset in the ileo-cæcal region, a corresponding upsetting of the rhythm was common in the duodenum. Keith made a very careful study of numerous specimens which he had obtained from operation and *post mortem*, and showed that in these nodal areas there were to be found gross pathological changes in the structures composing Auerbach's plexus. He considers that the structural changes found in the plexus are sufficient to derange the innervation of the intestine and cause stasis, and he also points out that stasis normally occurs in areas near the nodal zones. One cannot help feeling attracted by this theory of Keith's that alimentary stasis is caused by some disturbance of innervation in the gastro-intestinal tract, but I should like to venture further back in the history of this condition, and suggest that there is a disturbance of innervation before any gross structural change appears in Auerbach's plexus.

I believe that the firm peritoneal bands described by Lane, and the gross structural changes in Auerbach's plexus described by Keith, are both late events in the course of intestinal stasis, and are probably the result of a low inflammatory process produced by the action of toxins or bacteria which have passed through an atonic intestinal mucosa. It seems likely that intestinal stasis, apart from an infection of the gastro-intestinal tract, is a condition which may exist for a long time without giving rise to symptoms. We all know people who have lived long and comfortably, even though they have been the subjects of chronic constipation all their days. If, however, such a person were to acquire an infection of the gastro-intestinal tract, it is easy to see how the antecedent tendency to intestinal

*An address delivered on January 20th to the Section of Balneology and Climatology of the Royal Society of Medicine.

stasis would aggravate the effects of the infection. I do not think, however, that stasis always precedes infection. Infection may actually produce stasis in a susceptible person—that is to say, in a person whose nervous system renders him easily liable to disturbances of innervation in the gastro-intestinal region. The main point is that whether stasis precedes or succeeds an infection, there is in all probability an inherent tendency to disturbance of the gastro-intestinal innervation in all patients in whom alimentary stasis exists.

Following out Keith's theory that some disturbance of innervation is at the back of the condition of alimentary stasis, one may obtain a good deal of information by a study of what occurs in functional atony of the stomach, where a considerable degree of distension and dilatation of the organ may occur without there being any organic obstruction at the pylorus. In this condition one finds clinically an atony of the main body of the organ with a tendency to hypertonus or lack of proper relaxation of the sphincteric areas at the cardia and pylorus. To this state of sphincteric spasm Hertz has given the name of "achalasia," which is a convenient and descriptive term. It is interesting to remember, in this connection, that it is in these two sphincteric areas, at the cardia and the pylorus, that the two considerable aggregations of myenteric plexus exist in the stomach. Similarly, it is most probable that in the intestine there exist areas more or less coincident with the nodal areas described by Keith and Alvarez in which a sphincteric action may occur, although not so completely as in the cardiac and pyloric regions of the stomach. This is particularly noticeable at the lower end of the ileum, where the lumen of the gut is sometimes seen during an X-ray examination to be greatly narrowed, and the opaque contents are visible as a thread-like shadow.

It seems likely that in the stomach a condition of achalasia at the cardia and at the pylorus accompanied by an atony of the body of the organ is produced by some disturbance of the balance normally preserved between the action of the vagus and the splanchnics, and it has been pointed out by Percy Mitchell, Wethered and myself that this achalasia and atony may be corrected by stimulation of the skin over the left side of the abdomen in certain definite areas—namely, along the rib margins between the 7th and 10th costal cartilages, and over the lower borders of the ribs about the level of the normal upper border of the stomach. Similarly, it seems likely that a condition of achalasia of the sphincter areas in the intestine accompanied by atony of neighbouring internodal areas may be produced by just such a loss of balance between vagus and splanchnics. This condition would produce, as in the stomach, a stasis of the intestinal contents near these areas. Some little time ago I endeavoured to find out if there were other areas on the skin surface of the abdomen through which stimulation could be applied which would produce a more vigorous peristaltic action in the intestine, with increase of its tone. It occurred to me that the duodenum could be stimulated through a skin area a little above the point to which pain produced by the gall-bladder is referred, and also, recollecting how in tuberculous peritonitis pain is so often referred to the umbilicus, that one could possibly find skin areas in the umbilical region through which the small intestine could be stimulated. It is my belief that by stimulation of the skin just within the right costal margins above the point to which gall-bladder pain is referred it is possible so to stimulate the duodenum, and experiment suggests that a similar stimulation of the lower part of the ileum and of the cæcum can be effected through an area of skin in the middle line just below the umbilicus.

Following up these observations, I endeavoured to find if similar areas existed through which various parts of the colon might be stimulated, and I conducted a series of experiments by which I tried to localise those points on the abdominal wall to which pain would be referred when violent overaction and cramp of the colon were provoked. I introduced a rubber bag into the rectum, inflated it very rapidly to over-distension, and I found that in the fifteen patients on whom I made the experiment the result was violent pain in the suprapubic region, deep-seated discomfort over the sacrum, and also discomfort of a much more superficial description in both iliac regions. I chose the two iliac regions as the probable stimulation areas, and I am becoming convinced that through these areas it is possible to induce increased peristalsis in the colon. Keith's observations on the aggregations of Auerbach's plexus seem to me to suggest an explanation of the occurrence of such skin areas, in so far as they hint at a possible spinal connection of a segmental nature with various parts of the intestine, and at the same time suggest strongly the direction of the paths by which pain may be referred from the intestine to various portions of the abdominal wall, and the paths by which an impulse from the skin may travel to produce a contraction of the stomach or intestine.

So far the hydrological element in this paper has been slight, but it seems to me that a study of those stimulation areas may be of great use to the hydrologist in the application of douches and in the explanation of the effects of baths of all kinds and of electrical treatment on gastro-intestinal stasis. One has to remember that in the gastro-intestinal stasis which produces symptoms, we are dealing with two conditions—an atonic condition of the stomach or intestine with delay in the passage of the gastro-intestinal contents, and also with a microbic invasion of the alimentary tract, which may either precede or follow the existence of such stasis. Lavage of the stomach is a useful and effective way of removing infection, and the drinking of large quantities of water, especially water highly charged with certain salts, may be very useful in washing out infection from the small intestine, or even from the large intestine, and the Plombières douche is certainly in many cases an extremely efficacious way of removing infective material from the colon. If, however, lavage of these various kinds is used alone, there remains, after the infection has been removed, an atonic condition of the gastro-intestinal tract which will encourage reinfection. It should be the object of the physician not only to remove infection, but to endeavour to prevent its recurrence, and it is here, I think, that the use of baths and douches of various kinds forms an important part of the treatment of alimentary stasis.

Baths and douches, however, must be employed in a careful and intelligent way, and I do not believe that it is sufficient to direct a powerful stream of water against the body to produce the maximum benefit. It is true that such a practice would undoubtedly increase the power of the skeletal muscles, which is an extremely important thing in intestinal stasis; but I believe that douches directed particularly to the stimulation of the skin in the areas which I have already described will produce a very much much more powerful effect in restoring tone to the intestine than any more haphazard method.

One has to remember that in inducing contractions of the stomach and intestine by stimulating

various areas of skin, one probably acts by means of a true reflex. In the case of the stomach I have found that to excite this reflex repeatedly in a short time one has to employ stimulation of a very gentle kind, which must be intermittent. Ordinary massage of the abdomen is incapable of inducing the desired reflex action, and really heavy massage of the abdomen may, besides, be an extremely painful process. In a lesser degree the same remarks apply to the intestine; the stimulation must be delicate and intermittent. Personally, I use my fingers as the means of stimulating the reflex, and in the case of the stomach, at least at the beginning of treatment, this seems to be the best way, because one can observe by auscultation when a powerful contraction takes place, and cease stimulation for a time. It seems to me, however, that stimulation ought to be not only intermittent and delicate, but varied, even in the case of the stomach, so that after the patient has been treated for a time by digital stimulation, douches and baths might be employed with great advantage, not only to continue the stimulation, but to increase the power of the abdominal muscles. The douches and baths, however, ought to be of a somewhat different character from those at present in common use. I cannot imagine any sensation more horrible for a person with a neurotic temperament and hypersensitive body wall than to be suddenly smitten under the fifth rib by a stream of water violently projected by an unfeeling bath attendant. Such a process may result in one powerful contraction of the stomach, but carried on even for a few minutes might well induce cramp or sluggishness of the organ for some time afterwards. It is true that cutaneo-gastric reflexes can be produced by pain, but while other methods remain it is not wise to employ this as a therapeutic measure. I would suggest that in the treatment of gastric stasis sprays of varying degrees of hot and cold water, or that excellent institution, the under-water douche, in which the effects of bath and douche are combined, would be of service. Similarly, with regard to intestinal stasis, the mere haphazard douching of the patient's abdomen is not enough. Douching combined with ordinary massage may in a certain number of cases do good, but in many cases it does positive harm. The tender abdomen must be treated tenderly: it is not an unknown fact that rough handling of the right iliac region may induce serious discomfort in a person who has had appendicitis. I would suggest that in the treatment of intestinal stasis, the various skin stimulation areas, in the right hypochondrium, below the umbilicus, in the right iliac region and in the left iliac region, should be stimulated *seriatim* by douches of a suitable kind, and that such treatment might be followed up with advantage by the employment of various electrical currents. With regard to these technical details I speak with the deepest humility, and merely present to you the roughest possible sketch in the hope that someone may be able to fill in the details.

I should like to refer once more to the atonic and easily distensible stomach, which is so often found in conjunction with intestinal stasis. I have met many people to whom the drinking of vast quantities of saline water has brought severe discomfort, which has lasted long after the patient has left the spa at which he sought relief. I do not think that any patient should be subjected to treatment by the drinking of large quantities of water until an accurate estimate of the muscular power of the stomach has been made, and until the atonic stomach has been restored to something like normal action. The Plombières douche, too, which is a very useful weapon in many cases, despite the humiliation which its employment brings to a proud man, is not always successful in patients of delicate stomach, not only on account of the mephitic vapours produced during its use, but also on account of the nausea which many patients feel during and after lavage of their rectum and colon. I have seen many patients who have been unable to tolerate the use of the Plombières douche, and in all of them I have found a tendency to atony and distension of the stomach. Such atony and distension may be a primary fault or may be the result of the colitis. One must remember the fact that disturbance of the normal rhythm of contraction in one gastro-intestinal segment may be reflected to another. I would suggest, therefore, that before the persistent use of the Plombières douche any condition of atony or stasis in the stomach should be corrected first of all.

I feel that I may have dwelt perhaps too long on the theories of the causation of gastro-intestinal stasis, but my excuse is that one cannot at the present day advocate any form of treatment without having the support of physiological and pathological observation.

DISCUSSION.

Dr. CAMPBELL THOMSON stated that he was much interested in Dr. McClure's paper, both from the neurological aspect and also in relation to the condition of acute paralytic dilatation of the stomach on which he (Dr. Campbell Thomson) had formerly made some observations. From Dr. McClure's investigations it appeared that in seeking to stimulate the walls of the alimentary canal two distinct points must be borne in mind—viz. (*a*) the particular areas over which stimulation, to be effective, must be made, and (*b*) the type of stimulation which it is necessary to use. The latter would seem to be the most important matter, and while agreeing with other observers that a strong and crude stimulus, such as arouses muscular contractions of defence, is not likely to be successful, he believed that further investigation is necessary in order to determine more exactly the nature and intensity of the particular stimulation that is likely to produce the maximum effect over a given area.

Dr. R. A. YOUNG congratulated Dr. Campbell McClure upon his paper as an example of the opportunities for research still afforded by careful clinical observation, and also as an illustration of the fact that it sometimes happens that the physician's researches might point the way to fruitful investigations on the part of the physiologist. He had long been convinced of the value of the method of cutaneous stimulation of the abdominal wall in gastric stasis, according to the method introduced by Dr. Percy Mitchell and further investigated by Dr. McClure and Dr. Wethered. He had seen very good results from its use in cases of atonic dilatation of the stomach, and concurred in the opinion expressed by Dr. Nevill Wood that it was possible for patients to employ the method themselves if it were explained to them and they were gifted with sufficient patience and persistence to employ it. The areas described by Dr. C. McClure as causing contraction in the duodenum and intestine were new to Dr. Young, and he suggested that it would be very interesting if Dr. McClure would, in his reply, give some further details as to the method of the stimulation he employed, and its direction. He quite agreed with the suggestions made for the utilisation of these areas by the hydrologist in his special forms of treatment. He would be glad to know from Dr. McClure if any observations by means of opaque

meals and the X-rays had yet been made confirming the effect of stimulation of these lower cutaneous areas in inducing contraction of the bowel. He also inquired whether any actual cases of stasis in the colon had been treated by this method. He was of opinion that the method was not as widely known as it deserved to be.

Dr. Leonard Williams said: With much of Dr. Campbell McClure's paper I cordially agree; from some of it I most profoundly dissent. From the view expressed in his closing sentence I differ as profoundly as it is possible for me to differ from anyone about anything. As a clinician, I decline to be held in check by the mere laboratist; for there are more things in the heaven and earth of the human body than are dreamed of in test-tube philosophy. The physiologist will tell you that venesection is useless, and propounds inane paradoxes about bleeding a man into his own blood vessels. Experience tells me that venesection does good, and I shall continue to employ it whether the test-tubes ring in consonance or rattle in dissonance. The laboratist will tell you that the skin has no absorptive power. I known that it has, and I shall continue to cure syphilis by the inunction of mercury, in spite of the surly inability of the physiologist to explain the procedure.

In saying this, however, I must not be understood to belittle the work which the physiologist has so often done by pointing a better way to the clinician. Of this there could be no finer example than the masterly researches into the motors of the intestinal tract conducted by Professor Keith and unveiled by him in his Cavendish Lecture. These researches, as Dr. McClure has done well to insist, must necessarily colour our conception of the immediate causes of intestinal stasis and modify our hitherto accepted treatment. They point the way to the discovery and correction of the individual peccant motor. We shall no longer blaze into the brown as, with a Pil Carthartic Co., we are now clumsily in the habit of doing; we shall select our bird and admonish it either by tickling a cutaneous area or by some other stimulant which accurately fits the sloth.

In this very excellent and thoughtful paper, by his own researches into the skin areas to be stimulated in certain cases, Dr. McClure very appreciably advances us along this path, and his appeal to the practising hydrologist to cease blunderbussing the whole abdomen and to take to sniping at the indicated areas is both pertinent and timely. It is the logical hydrological outcome of the new gospel.

Of course we have had to suffer the microbe. In medical articles he takes the place of King Charles' head in Mr. Dick's memoirs. He cannot be kept out. But what, may I ask, is the microbe doing in this *galère?* What has he to do with the cause of intestinal stasis or its treatment either by hydrology or grabbling? That the microbe is a result of stasis is accepted as a matter of course. That does not surprise me any more than it shocks me to see a dandelion growing on a dung heap. What we want to know is why the dung heap is there; there, at the road-side, or there, in the intestines. The one is a matter for the police; the other for the pathologist. In neither case does it help us to fawn upon the flora. This bacteriological babble displays an extraordinary confusion of thought. You might as well ask me to believe that the dandelion produces the dung heap as to suggest that the Bacillus coli communis causes the stasis. Bacteriology has its place, and a very large one it is, in the causation of disease; but in the name of common sense let us keep it in its place, and let us avoid the present tendency to drag in a coccus by the scruff of the neck not so much to explain a pathology as to decorate and embellish a clinical picture.

In our apotheosis of the microbe we seem to have forgotten the Parable of the Sower, which tells us that the success of the seed implies suitability of the soil; if the microbe multiplies it is the fault of the *milieu*; improve your *milieu* by irrigating it with sound sanguineous fluid, and the microbe dies. "Who hath ears to hear, let him hear." And the way to secure sound sanguineous fluid is to take care of the internal secretory glands, those elusive tributaries of the liquor sanguinis upon whose proper balance so much depends. In the case of the abdomen, the glands which are presumably of the greatest moment are the members of the chromaffin system, with the adrenals at their head. If we would study the intestinal motors and their petrol supply, we must not forget the association of these glands with the sympathetic system nor the power of their secretion over unstriped muscle. Nor is it ever wise in connection with the ductless glands to lose sight of their interdependence. A lazy chromaffin system yielding a meagre tribute to the blood stream and causing stasis may be lazy because it lacks the wonted stimulus from—the thyroid I must not say, but the pituitary, the ovary or the testicle. It may be necessary—it often is—to look far beyond the obvious offender to find the gland round which the disturbance of function is stealthily gyrating. To be able to locate the individual intestinal motors is good; to be able to tickle them into their duty is better; but until we learn to include in the indictment the ductless gland or glands which are failing to deliver the necessary petrol, we shall fail of our larger purpose, tickle we never so cunningly.

THE EFFECT OF THE WAR ON THE MEDICAL PROFESSION.*

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War has now been raging for fifteen months, and it is possible, in some degree at least, to judge of its effects, immediate and remote, on the medical profession. Statistics are generally considered dry, and I do not propose to inflict many upon you this evening; but it is necessary to mention some figures which are of immediate interest.

In the year 1903 there were 37,878 medical men registered in the United Kingdom, and at the end of the year 1913 the number had risen to 41,940, after deducting removals by death, resignation, etc.—an average increase of 400 per annum. This increase was maintained in 1914, and the total number of registered medical men on the Medical Register this year is 42,378, in spite of a very large number of removals from the Register under Section 14 of the Medical Act.

Prior to the year 1914, between 1,050 men and 1,150 new names were added annually to the Medical Register, and it is a significant point that in 1914 the new registrations totalled 1,433—an increase of 265 on the previous year.

You may remember that shortly after the outbreak of war supplemental examinations were held by nearly all the licensing bodies in order that students who were prepared to be candidates for the final examinations might present themselves at once. This undoubtedly had the effect of "speeding

* The Presidential Address inaugural to the Forty-first Session of the Dublin University Biological Association, delivered November 20th, 1915.

up" the senior students, who, on receiving their qualifications, were able to offer themselves for commissions in the Naval and Army Medical Services.

The figures for this year are not, of course, yet available, but from inquiries which I have made I understand that the number of new registrations is up to, or above, the average, in spite of the fact that a large number of comparatively senior medical students were given commissions in the combatant forces.

We may infer that the war has stimulated the senior students to become qualified on an average rather more quickly than they would have done in peace time. But what does it portend for the immediate future? Owing to the large number of students in their second, third, or fourth year who have received combatant commissions or have become surgeon probationers in the Naval Medical Service—many of whom have already fallen in the country's cause—the number of candidates who should be presenting themselves for the final medical examinations this year and next year is reduced to an alarming extent—namely, by a quarter of the average supply.

It is admitted that, even before the war started, the number of medical men was not considered sufficient, having regard to the increase in the population, the requirements of the State, the demands of the Colonies, and the passing of the Insurance Act.

Great demands on the medical profession have of necessity been made by the State for the service of the troops in the present crisis, and in spite of the good response of the members at home and abroad the services of thousands more are required, in order that the necessary reserves may be trained and ready for service.

Remembering that in time of peace the supply of doctors was barely sufficient, what has been the effect of the war?

In the first place it has shown that what was a bare sufficiency in ordinary times has been turned into a marked deficiency on the occurrence of a crisis. We have evidence of this since the State is calling for more, and yet more, medical men; in civil practice doctors are unable to obtain the services of an assistant; a *locum tenens* is almost unobtainable, and the work of thousands of doctors has of necessity been increased beyond the limit of safety as regards their own health.

More work is being done in the civil hospitals by a staff reduced in numbers, and the patients in Red Cross hospitals and convalescent homes are to a large extent being attended by civilian practitioners, making a further demand on their gratuitous services.

Secondly, it has enhanced the value of the doctor from the "commercial" point of view, as evidenced by the fact that the State offers the recently qualified man an income of £400 a year; doctors willing to go as "assistants" are in a position to bargain, and to give their services to the highest bidder, and practitioners requiring a holiday, who have been able hitherto to obtain the services of a *locum tenens* at three or four guineas a week, are now offering, often unsuccessfully, eight, ten, or twelve guineas a week.

Thirdly, the numbers removed from the Register by death will undoubtedly be increased as the direct or indirect result of the war.

And in the fourth place, the war has proved that the profession of medicine, not being overstocked, holds out attractions to parents with sons and daughters requiring a profession.

Turning to the Register of Medical Students we find that in the United Kingdom in each of the years 1909 and 1910, roughly 1,500 students were registered. In the two following years the numbers fell to 1,232 and 1,397 respectively, and increased in 1913 to 1,480.

In 1914 there was a further increase of 120, the total number beong 1,600. We have to go back to the year 1898 to get an "entry" of similar number, and to 1896 for a larger entry.

The figures this year are not available, I regret to say, but from inquiries I have made I am assured that the numbers will be increased as far as Ireland's share is concerned—a larger proportion than usual being women students.

In Scotland the entry is only a little below the average, the number of women students being unusually high.

In Engand, however, the falling off is most marked. At Cambridge, for instance, only 41 students have entered as compared with 116 in 1913. At St. Thomas's the entry is only 45 per cent of the average. At Guy's, King's College and St. Mary's the decline, as compared with the average for the three years prior to 1914, is about 15 per cent. At the London School of Medicine for Women, however, a record has been made, the number of entries being this year 110, as compared with 69 last year, and an average of 44 for the three years preceding the war.

The immediate effect of the war on the medical schools was that a large percentage of the second and third years' men who felt that they could not expect to be qualified before the war was over, volunteered and received, through the Officers' Training Corps, commissions as combatant officers.

A small percentage of the fourth years' men followed the same course, or became surgeon probationers in the Navy, but the majority were persuaded to continue their studies, to give their help urgently required at the civil and Red Cross hospitals, and to complete the training which would make them still more efficient to help the State. They now are reaping the just reward of their patience.

Doubtless, many of those who intended joining a medical school in October, 1914, found the call to arms a greater attraction, but to judge by the figures from the Students' Register, many perceived that the deficiency in the number of the profession would have to be made good in the near future, and that the sooner the long and arduous course of preparation was started, the sooner would they be in a position to offer their services to the State or the public.

From what I have said it is inevitable that the incomes of the medical schools will in the near future be diminished by the decline in the numbers of students. They will, of necessity, be further crippled as a result of the opinion recently expressed by Lord Derby anent the recruitment of medical students. The entries for post-graduate courses have been reduced by over 60 per cent., and this will stlll further diminish the income of the schools.

The war has given women an opportunity of proving their mettle, and that they have taken it with earnest enthusiasm is common knowledge. The members of our profession at home and abroad have every reason to acknowledge and to be grateful for the invaluable work they have accomplished in Red Cross and other hospitals; not only in the nursing of their patients, but also for the continuous supply of medical requisites and comforts for the patients.

War has had the effect already of levelling many prejudices, and not the least among them is that

against the women members of our profession many of whom have been successful candidates for appointments hitherto not open to them.

We know that in many hospitals in France and Belgium a woman doctor may be found on the staff, but Dr. Louisa Garrett Anderson was the first to organise and work a Red Cross hospital, completely staffed by women doctors. Such was her success in Paris that she was requested to organise and take charge of a hospital with 550 beds in London.

To these examples and successes must be attributed the large increase in the number of women students on the *Register* this year.

The decision of the Earl of Derby that "it is the duty of medical students other than those in the fourth and fifth years of study to join His Majesty's forces" was made public early this month, and this decision was given after considering all the arguments to the contrary that were urged by a most influential deputation.

It is not for me to question that decision, but I may be permitted in this paper to enumerate some of the considerations that were, doubtless, urged by the deputation:—

1. That the medical student will be of more service to the nation if he continues his studies and qualifies in three, four or five years' time than if he joins the Army as a combatant at present.

2. That the country requires, and will require, more doctors, but is getting, and will get, fewer.

3. That the number of students at the ten leading English medical schools during the first year of the war was 1,891, as compared with a normal total of 2,562, and a great many of this diminished number have since joined the combatant forces.

4. That it is not for the ultimate good of the nation to paralyse for three years the supply of doctors which before the war was barely sufficient, and which as a result of the war will be, in any case, rendered insufficient to a marked degree.

5. That the medical schools have a claim for consideration. The cost of their upkeep does not, and cannot be made to, vary in proportion to the number of students attending. Their incomes, which are largely, and in some cases altogether, derived from the fees of the students, have been perilously reduced, and a further depletion of students will spell financial ruin, in that they will be unable to maintain what the state requires, and rightly requires—viz., a hight state of efficiency.

6. That it is not to the interest of the country to induce students to begin medical studies at the early age of sixteen.

7. That if the supply of properly qualified men is cut off, the deficiency will lead to a deplorable lowering of the standard which we have for years past endeavoured to maintain in the interests of the country and of the profession.

Let us now consider how the question of supply and demand will stand when the war is over.

At first sight it would appear that the release of those holding temporary commissions in the services would cause, so to speak, "a glut in the market" of medical men for civilian practice.

I do not believe that this will be the case. The establishments of the Navy, and still more of the Army Medical Service, will have to be kept up for some years at a much greater numerical strength than heretofore, and the places of those who have fallen will have to be filled up, with the result that a very large percentage of the younger members holding temporary commissions will be offered and will accept permanent commissions. Then there must necessarily be a large number of the senior members of the regular services who, being eligible for pensions, will seek retirement after the arduous work of the war. There must of necessity be others who will be forced to retire on account of disablement or ill-health. The more senior civilians who have received temporary commissions will, no doubt, come back to civilian practice; but they will not affect "the market," as they will but take up the work that was theirs in pre-war days.

The demand for candidates for junior medical posts will be out of all proportion to the supply available.

Referring to the subject of medical students and recruiting, Mr. Tennant stated in the House of Commons:—"I think that we must remember that we have first to win the war, and afterwards to encounter the problems arising out of it, *if they do arise.*"

I maintain that the problem of the deficiency of doctors for the community will have to be encountered, and the question is how?

The necessary numbers could be obtained:—(1) by lowering the standard of the examinations held by the licensing bodies; (2) by shortening the existing five years' curriculum; (3) by allowing posts hitherto held by properly qualified men to be filled by unqualified men!

The prospect is not a pleasing one in the light of the future interests of the community, or of our profession.

But of one thing there can be no manner of doubt—namely, that women doctors will play an increasingly important part in the near future in looking after the health of the nation, and that they are preparing to do so is evidenced by the figures in the *Students' Register.*

The Government will look to those responsible for medical education for a solution of the problem of deficiency, and unless some solution is forthcoming the State will allow posts hitherto held by medical men to be filled by those who are not licentiates of medicine, surgery, and midwifery.

Before the war, the State owed much to the medical profession, and since the war began who can calculate by how much that debt has been increased? Let us hope that the State will ever hold that debt in mind.

To meet the demand, the students must first be secured, and then trained.

I do not anticipate any difficulty, as soon as the war is over, in obtaining the requisite number of students.

The professional classes, from whom our recruits are almost exclusively drawn, are quite alive to the fact that there are many openings in our profession—at home and abroad—and, having themselves come into closer contact directly or indirectly with our actual work, they will be even more in sympathy with our profession, whose reputation, good before, has been enhanced by the war. That they will supply the students I am confident.

The essence of the difficulty as regards the training is the element of time.

How is this difficulty to be met?

The lowering of the standard of the licensing examinations would accelerate the passage of those who are at present, or will be in the near future, negotiating the stormy seas of study, but the very slight advantage to be gained in numbers would be many times outweighed by the obvious disadvantages attendant: such a solution is unthinkable.

If the five years' curriculum is to be considered a *sine quâ non*, I see no way of supplying the deficiency except by giving publicity to the fact of the deficiency and urging parents immediately

to put their boys or girls who are sixteen years of age to the study of medicine. The disadvantages of this course are many, from the point of view of the parents, the students, and their teachers.

But must the five years' curriculum, as at present interpreted, be considered a *sine quâ non?*

If the answer is in the negative a very appreciable step can be taken towards the solution of the problem.

To put it briefly, an attempt must be made to modify the curriculum, which now takes five years to complete, so as to squeeze it into four years.

How this can best be accomplished must be decided by those responsible for medical education.

There would appear to be a possibility of curtailing—(*a*) the "systematic lectures" on subjects which are also taught practically; (*b*) where time is of such importance, the summer vacation. This would involve a strain on students and teachers alike, but it should be borne in mind that the strain of war will be felt by every branch of the community, including our profession, for a very long time after the day that peace is declared.

Let us now briefly turn to another matter.

The new problems of treatment which have arisen as a direct result of the war have given a further stimulus to research work.

I do not intend to dilate on this subject, partly because the result of the work hitherto accomplished is *sub judice*, and partly because it is difficult to estimate to what extent some of the methods, which have proved useful in war, will affect subsequent practice in normal times.

It is of interest to note that a great deal of the work which promises to have the most far-reaching effects is being done by graduates of this university.

The war has emphasised the benefits of organisation and the disasters attendant on the want of it. Will the lesson be learnt and acted on by the medical profession? Time alone will tell.

Action in that direction is at present impossible, but I trust that the day is not far distant when such organisation will be undertaken, and will result in benefits to certain branches of the profession, such as the poor-law service in Ireland, whose conditions of service should be improved.

The industrial districts of England will be able to offer financial attractions to doctors quite beyond those obtainable in very many of the dispensary districts in Ireland, and for that reason the dearth of doctors will probably be most keenly felt in Ireland.

Hospitals are inalienable adjuncts to the medical profession. In Great Britain and Ireland the hospitals have been very largely maintained by the voluntary subscriptions of the public. Financial stringency as a result of the war has not yet been felt as much by the public as it will be during the next few years. When it is at its height, while industries and trade are in the process of recovering, it is inevitable that the voluntary hospitals will suffer and suffer acutely, and unless State aid is forthcoming many a ward must be closed.

I cannot conclude without referring to the members of the profession who are with the Forces. Of them a lay pen has written: "In the Great War not only was the Army Medical Service found to be in a state of complete preparedness and efficiency to meet the maximum demand which, according to previous estimates, could be made upon it, but also when the reality was found to exceed that estimated maximum many times over there was enough patriotic energy to make the huge deficiency entirely good."

We who are members of the profession can best appreciate what those demands involve. We know that the difficulties were met and overcome only by most superhuman efforts of endurance at the call of duty.

The health of the troops and the testimony of the wounded bear witness to the way in which the work of the medical service is being carried out, and it seems that one unquestionable effect of the war on the medical profession will be to enhance its already honourable reputation.

PENETRATING WOUNDS OF THE CHEST IN WARFARE.

By H. PERREAU, M.D.,
Surgeon in the French Army Ambulance 12-22.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

THE question of penetrative wounds of the chest in warfare is one of sufficient importance to justify our returning to the subject now and again. On this occasion I propose to formulate the conclusions at which I have arrived with the experience gained during seven months at the front, of 117 chest wounds, of which number 67 penetrated the chest.

We are always taught to regard absolute immediate immobility as the first, and often the only, suitable treatment of penetrative wounds of the thorax. It is therefore important that we should make our diagnosis as promptly as possible after the arrival of the wounded, so that they have the benefit of immediate immobilisation which may be the means of saving life. So convinced am I of the importance of this immediate immobilisation that I set aside a ward for the reception of these cases adjacent to the reception room, so that they could be transported thither with a minimum of disturbance.

I have just pointed to the importance of making the diagnosis of penetrating wounds of the chest at the earliest possible moment after the arrival of the wounded at the ambulance, but, as a matter of fact, this diagnosis is by no means always an easy matter. It is easy to make the mistake of taking a non-penetrating for a penetrating wound, but this entails no disadvantage for the patient, for after all, the enforced immobilisation can do him no harm, may even expedite healing. On the other hand, in an ambulance with a limited number of beds, the mistake would tend to reduce the number of beds remaining at our disposal for operated patients, for the gravely wounded and for non-transportable cases.

The direction of the track of the projectile and the situation of the apertures of entrance and exit are apt to prove misleading, because projectiles often run round the chest wall without entering the cavity.

Pain and oppression are often absent in penetrating wounds and, on the other hand, are often well marked in non-penetrating wounds, especially when the superficial or seton wounds are multiple as in wounds inflicted by shell fragments or grenades, and also when ribs are fractured.

Blood-stained sputum and actual hæmoptysis are often met with in non-penetrating wounds and may not be present in penetrating wounds, whereas limited or general subcutaneous emphysema is one of the certain signs of wounds of the respiratory apparatus. As a rule stethoscopic signs are of no assistance when the wounded reach us, because at the onset neither auscultation nor percussion yields any useful information.

The diagnosis of penetrating wounds of the chest is therefore often a matter of difficulty and

radioscopic examination is of the greatest assistance in these cases; indeed, it has on various occasions enabled me to transfer without detriment subjects who, without it, would assuredly have been thought to have penetrating wounds of the thorax.

I have insisted on the necessity for *immediate* immobilisation in these cases, but it must also be sufficiently prolonged to obviate consecutive complications, which are pretty frequent, or to mitigate their mischief when they do occur. Among these complications may be mentioned :—

(1) *Embolism*, which may be caused by any sudden movement, even after a lapse of time, and may prove rapidly fatal. I can recall one instance in which fatal embolism occurred on the twelfth day consequent on the effort to sit up, although the patient was thought to be out of danger.

(2) *Pleural effusion*, which is very common, serosanguinolent and hæmorrhagic, soon becoming purulent. This exudation is accompanied by the usual signs of pleural effusion, but it has seemed to me that the effusion is, as a rule, not very abundant and that it is exceptional in left-sided effusions for the heart to be displaced or for there to be any diminution of resonance in Traube's triangle, at any rate, as long as patients are immobilised in the ambulance.

(3) Subcutaneous emphysema, either limited or more or less generalised.

(4) Broncho-pneumonia and hæmorrhage from the lung are rarely met with in ambulances because they are, as a rule, too rapidly fatal.

The frequent complications: the embolism that so rapidly proves fatal, and the effusion that so readily becomes purulent, necessitating free thoracotomy, which takes so long to heal, render the prognosis gloomy. All the more important is it, therefore, to institute a treatment which may help us to obviate or reduce the frequency and the gravity.

This treatment, as already stated, is *immediate, absolute, prolonged* immobilisation.

This is how we proceed: as soon as a chest case comes into the ambulance, the patient is gently transported into the ward reserved for such wounds. There he is undressed and put to bed with every precaution, the wounds are dressed as aseptically as possible in order to lessen the frequency of renewal (every four or five days) and a wide body bandage securely immobilises the thorax. When pain and oppression are pronounced morphia is given in order to secure the necessary repose.

During the first two days the patient is kept on water diet and fluids are administered with an invalid cup (with a spout). This initial diet is not without its importance and has yielded me excellent results. It enables the patient to remain perfectly still, he is spared the troublesome effort to raise the head and it obviates the risk of vomiting, the consequences of which might be very serious.

During at least the first two days the patient is strongly advised to abstain from the slightest movement or effort of any kind, not even talking. I dwell particularly on these details because when embolism has occurred it was always when the patient was trying to sit up. After the third or fourth day the diet is gradually enlarged, the patients being fed with the spoon so that there shall be no excuse for sitting up. The immobilisation of the body as a whole is imposed for ten or twelve days, and I never allowed such patients to be transferred elsewhere before the fourteenth or fifteenth day.

The supervention of pleural effusion does not necessitate any modification of the treatment; indeed, I believe that complete repose greatly assists absorption of the effusion. I do not think that it is desirable to perform thoracentesis in cases of hæmorrhagic effusion, because it almost always reforms and may even become more abundant.

Throughout the duration of this immobilisation it is important to watch the respiratory rhythm and the temperature curve because, as has been mentioned, the pleural effusion is very apt to become purulent and this occurrence is shown by a rise of temperature with wide oscillations.

When suppuration sets in early and the effusion is copious, with disastrous effects on the general health, we must not hesitate to perform thoracotomy with a wide opening, resecting two or three ribs so as to allow the escape of the pus, whereupon the fever at once disappears.

When empyema only occurs later in the case, after ten or twelve days' immobility—that is to say, after the period when embolism is most to be apprehended, I see no objection to the transfer of the patient to more stable institutions where the necessary surgical interventions can be carried out in accordance with the notes on the hospital ticket.

In cases of penetrating projectiles that have remained within the chest, I do not think we are called upon to operate in the ambulances near the fighting line; indeed, for my own part, I have not witnessed any accidents from the presence of projectiles in the lung or even in the pericardium, as seen by radioscopy in two instances.

In the first case the bullet pierced the epigastric region and found its way into the pericardial cul-de-sac. The patient was transferred elsewhere on the 28th day in good health, with merely a slight effusion in the left pleura. In the second case the projectile entered in the subclavicular region and was localised by radioscopy in the anterior mediastinum to the right of the xyphoid appendix. A week later the patient presented signs of pericarditis, and puncture of the pericardium gave issue to two pints of fluid. Eight days after this puncture the patient was transferred in good health with only slight effusion in the pleura.

My conclusions are therefore that in penetrating wounds of the chest our duty in ambulances near the front is :—

(1) To make an early diagnosis, whenever possible by the aid of radioscopy.

(2) Immediate, absolute, prolonged immobilisation.

(3) Keep the patients on water diet for the first two or three days, not allowing them to raise the head to drink.

(4) Such patients not to be transferred until after a fortnight's immobility.

(5) During the first four or five days a daily dose of 10 cc. of camphorated oil.

(6) Except compelled, not to attempt the removal of the intra-thoracic projectile.

(7) Prompt, wide opening to give issue to early copious purulent effusions.

THE WAR—IMPRESSIONS: NEURO- AND PSYCHOLOGICAL.

By T. DUNCAN GREENLEES, M.D.Edin., F.R.S.E., Major, R.A.M.C. (T.),
Weymouth.

To those of us working in military hospitals many opportunities are given of noting the awful carnage produced on the human frame by modern methods of warfare; and, with an experience behind me of sixteen months, I have been most impressed by those cases, coming under our care, suffering from nervous and mental injuries and conditions consequent upon active service in the firing line.

These cases have passed rapidly over the range

of my mental vision with a kaleidoscopic effect, leaving but an evanescent image; but there were several which impressed me so much that I felt justified in recording these brief experiences (*a*) jotted down in the very short intervals of a strenuous life.

While the high explosive shell may produce very serious wounds, the mere explosion, and consequent sudden alteration in the atmospheric pressure, produce grave effects on the nervous system of those in the immediate neighbourhood. It is a condition of shock, but the term "concussion" has been perhaps more aptly applied to it. "Concussion," then, may affect the mental faculties, giving rise to profound mental symptoms, and in cases leading to actual mental disorder; or it may affect the spinal cord, causing paralysis of a temporary nature; or, finally, it may attack an individual nerve, producing local paralysis. I had one case of this latter condition under my care, where the muscles supplied by the musculo-spiral nerve were paralysed, and yet there was no wound visible, and the man informed us the conditions occurred immediately after a big explosion in his vicinity in the trenches. Lieut.-Colonel Barker, F.R.C.S., whom I saw in consultation over this case, expressed the opinion that "concussion" could affect the molecules of the brain, spinal cord, or individual nerves, upsetting, as it were, their normal order for the time being, and that, in his experience, these cases got quite well ultimately.

With respect to the cerebral cases—or "neurasthenia," as they are sometimes called—the utmost quiet is required in their treatment. These cases have the most intense dread of any noise—they generally sleep with their heads under the blankets; photophobia is marked, and they have a haggard, frightened expression, a condition more noticeable in the men who returned invalided from the first Expeditionary Force than in the more recent returns from the front. They sleep badly, have vivid nightmare, living over and over again in their dreams the agonising experiences they went through in the trenches. While at times fairly cheerful, they are more frequently irritable in temper, and cerebration is markedly torpid. There is general hyperæsthesia; one officer whom I saw professionally went into general convulsions when I approached to take his pulse, and one man started taking numerous severe and exhausting epileptiform fits. The expression may be vacant, and sometimes there is a "far-away look" in the patient's eyes, as if his thoughts were still in the trenches, with all their ghastly sights.

When the "concussion" affects the local cerebral areas controlling one or other of the senses, then there is entire obliteration of the functions concerned. While the ear-drum may be ruptured from the force of the explosion, it is certain in some cases deafness is present without this injury. During one of the engagements "somewhere in France" early last year an explosion occurred, and a man belonging to the 3rd Wiltshire Regiment was buried in the soil. A large mass of earth struck him on the back of the head, and when he was dug out it was found he was blind, the blow having been so severe as to have apparently "concussed" the occipital centre for sight. I saw him some months afterwards, and. taking a personal interest in the case, had him sent to Mr. Pearson's Home for Blind Soldiers in London, where he remained for about two months, and then came back to us. Everything pointed to the fact that the injury was functional, and therefore possibly only temporary; but on his return he was as blind as he had been when he left, and, indeed, he thought himself he was worse, for whereas formerly he could distinguish between night and day, latterly he could not see light at all. The short time he was in Mr. Pearson's home he was trained most efficiently to take care of himself, and one could hardly realise he was blind at all, the confident way in which he could walk about, steering aside from obstacles even before he came up to them, and he moved about the ward slowly without the aid of a stick. It is wonderful how the other senses develop when the eyesight is destroyed, and one fact I learned in studying this case I never knew before, and that is by the sense of feeling, perhaps aided by the sense of hearing, a blind man can learn the various colours. In testing him I tried in many ways to deceive him, but he laughingly said I was "fooling him," "for," he would say, pressing between finger and thumb a piece of coloured cord, "I can tell this is blue, for blue has always a rougher feel than red," and he would make me try the experiment by rubbing a blue and red piece of cord, and listen to the difference betwen the sound produced by a rough-grained article and a fine-grained one; but I confess my other senses were not acute enough to note any difference. Here he combined both the senses of feeling and hearing in deciding the colour, and as his work consisted in making coloured net-bags I never found him fail in complying with the orders he received as to the colours selected. Is it that the "graining" of an article is regulated by its colour, and in this way the blind can tell the difference? This was his own explanation, but I am unable to express an opinion in what I consider a most wonderful provision of Nature.

Another case, and he is still under observation, was that of a man belonging to the 3rd Dorset Regiment, who was exposed in close proximity to the bursting of a shell, and became suddenly both deaf and dumb. The deafness was profound—he could not hear a loud sound immediately behind—although the tympanum was intact. Both deafness and dumbness were, strange to say, intermittent. If he were upset by any trivial matter he could speak and hear quite well for a few hours, and then the infirmity returned. On one occasion he was much disturbed when he was informed he was to be removed to another hospital—he preferred to stay where he was—and on the day of his removal he came to me quite excitedly and reported he could both speak and hear perfectly well, and that he wanted to go back to his regiment at once as there was a draft about to proceed to the front, and he was anxious to join them. Unfortunately the "cure" only lasted a day or so, and he is again deaf and dumb. It is suggested that hypnotism would be best for such a case, as it is a purely functional condition.

The cases of spinal "concussion" from high explosive shells I have seen are few. The symptoms are paraplegia of more or less severity, and of variable duration. No trophic changes occur in simple "concussion" such as is found in actual cord injury. Indeed, in many cases of gunshot wounds I have seen few where the cord has been implicated; I would not like to say that this experience was general, however.

Gunshot wounds of the nervous system is a subject so extensive that it can only be referred to briefly here. Given a perfectly clean, naked body, the modern bullet could pierce a channel right through it, and, unless it came in the way of some vital organ, the wound would heal quite satisfactorily, often by first intention, if the opportunity is

(*a*) *Caledonian Medical Journal.*

given it. Unfortunately, it is often the case that these aseptic bullets carry along with them some septic clothing, and as a result the trouble begins. I have been much impressed by the satisfactory healing of most gunshot wounds, unless complicated as above, or by the damage caused to bone, nerve or vessel. The wounds heal up in a very short time, leaving little scar, and no ill effects. Within the first nine months of the war I have passed as "fit" men who have been invalided home from wounds three times.

I have seen few cases of cerebral injury the result of gunshot wounds—possibly most of these cases are immediately fatal—and in only one case was there a bullet embedded, according to the radiograph, in the parietal region of the brain, giving rise to no marked symptoms, however.

The treatment of injuries to nerves, either from bullets or shrapnel, depends on the condition of the nerve. The nerve may be divided, partially or entirely, or it may be embedded in cicatricial tissue so that its functions are destroyed. Wonderful results have followed the tying of severed nerves, and the dissection of those embedded has, in my experience, resulted in restoration of their function.

I saw a large number of cases of "frost-bite" last winter, and I include this condition among my cases of neurological diseases. The name is a misnomer; "frost-bite" often occurred when there was no frost, but always when it was wet, and when the men were standing in wet trenches for a long period of time. Rather than being caused by frost, it is due to constriction of the circulation in wet surroundings. Except in rare cases of true frost-bite, there is no actual destruction of tissue; the feet are swollen, livid, cold, and perspire freely. The same condition was found in the hands. I believe "trench frost-bite" to be a condition of peripheral neuritis in which the thermal functions of the nerves implicated are at fault.

Again, "trench rheumatism" presents few of the symptoms of rheumatism, and must, in my opinion, be placed in the same category as frost-bite. There is less, if any, affection of the muscles than there is of the nerves, and the disease is undoubtedly more a "neuritis" than it is a "rheumatism." It does not respond to the usual remedies of rheumatism, baths of various kinds fail to relieve it, and the only cure is some form of dry heat. I thought it a great pity the scores of poor fellows suffering from "rheumatism" I saw last winter were not sent direct to Egypt rather than to this damp country. Everything was done for them here, but what was the use of medicines, with the glass low and raining nearly every day?

In concluding these somewhat rambling notes of some of my impressions, I would like to refer to the two departments of the British Army least open to criticism, and these are the A.S.C. and the R.A.M.C. The manner in which millions of men in the fighting line—all over the world—are being fed, clothed, and supplied with munitions of war in a continuous and ever-increasing stream, and the speedy and systematic manner in which the wounded are being tended in the trenches while still under fire, removed to the clearing stations, classified there, sent to the base hospitals, and finally, in many cases within forty-eight hours from the time of injury, removed to some comfortable English hospital, are marvels, and will redound to the credit of these two departments when the history of this war is written.

And a meed of praise for our brave boys at the front who are carrying this world burden on their shoulders for King and country. Never in the history of Great Britain, perhaps never in the history of the world, has there been such a war waged, and our soldiers have borne themselves like heroes and descendants of heroes. In South Africa, and again in this country, I have learned to know the professional soldier and to love him for what he is; he is not a haloed saint, nor is he the sinner he is sometimes depicted in peace times. He is loyal to his King and country, obedient to his officers, a true comrade to his chums, and never wanting in chivalry to a woman. He is proving himself every inch a gentleman and a man, and this cannot be said of our enemies, who are beasts, and—there is no German word for "gentleman"!

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

ABOUT EPIDEMIC NEPHRITIS.

To the Editor of The Medical Press and Circular.

Sir,—I am afraid I am not prepared to accept unproved hypotheses, even when they emanate from Vienna. But Klein and Pulay's view differs in some important particulars from Lieutenant McWalter (whose letter on the subject appeared in your last issue). They thought that protective inoculation for various intestinal diseases, of which enteric was one, might have produced pyelitis. They did not, as Lieut. McWalter does, assume that because they found B. coli in the urine, that the disease was therefore one due to another microbe—the B. typhosus. Thirteen speakers took part in the discussion which followed, and all with one exception disagreed with Klein and Pulay's view. It was pointed out that the curve of incidence of the intestinal diseases differed entirely from the curve of incidence of the nephritis, and that in many cases the disease was independent of B. coli. The readers of the paper laid stress on the abundance of leucocytes in the urine, as pointing to the condition being a pyelitis, but Dr. Mackenzie Wallis's recent work shows that there is a similar abundance of leucocytes in scarlatinal nephritis. In the American Civil War there were more than 14,000 cases of nephritis, although the number of troops in the Northern Armies never exceeded 700,000. Yet anti-typhoid inoculation was then unknown. Inoculation was largely practised in the South African War, and although typhoid was rife, nephritis was extraordinarily rare. Are we to conclude that whereas inoculation did not then modify typhoid fever in this way, it has now altered it beyond recognition? And if it did so in Flanders, why did it not do so in the Dardanelles?

I am, Sir, yours truly,
W. Langdon Brown.

60 Welbeck Street, London, W.
January 29th, 1916.

MEDICAL MEN OF LETTERS.

To the Editor of The Medical Press and Circular.

Sir,—I have read with great interest the instructive contribution to the history of medical culture which has just been presented in the columns of the Medical Press and Circular from the pen of Mr. Maidlow. The perusal recalled the fact that no department of human knowledge is too remotely placed to shed some illustrative light on the theory

and practice the healing art—the one profession which was practised and blessed by the Divine Saviour of Humanity during His earthly pilgrimage; for these take, or should take, thought for all the constituent parts and aspects of *homo sapiens*, both individually and collectively. Also, the fact that the medical armamentarium with which we are at present provided is really the resultant product of a thoroughly irregular and large incompatible mass of opinions and statements, much oftener forced upon public attention and recognition by faked report and furious advertising than by conscientious clinical record of obvious facts; or by scientific acumen, or logical criticism. Thus has gradually evolved the present *status quo*, in which the great majority of current remedies are employed and applied *because* they had been used in *presumably* similar cases by a popular clinical teacher of the past days of the curriculum; or stand recommended in the pages of the "Dictionary of Treatment," which is always conveniently placed within elbow range for ready reference by the prescriber. And so it comes to pass that the only safe practitioner—in the mind's eye of the really discriminating—is the member of the minority who has carefully and conscientiously assimilated a competent knowledge of the *history* of drugs and of symptoms, and who accordingly knows the origin of the stamp which has given each its present accepted face value.

This broad wave of whirling thought was brought to my mind on seeing the name of Oliver Goldsmith among those whose memory has been distinguished by the attention of Mr. Maidlow. I feel no fear of successful contradiction when I refer to the same as that, of all those known to the annals of medicine, which has secured the firmest hold on immortality. In confirmation of the view thus expressed, I will here mention no other corroborative testimony than the fact that statistics of quotation published about a year ago, by one of the greatest living authorities, show that "*The Traveller*" is the *most frequently quoted of all existing poems*.

But the above-mentioned are not the special considerations that have urged me to present myself in print on the present occasion. The stimulus was provided by the fact that Mr. Maidlow repeats the well-worn mis-statement of the regulation biographers of "poor Goldie": that he "was born at Pallas." The village of Pallas in the county Longford was the residence of the Goldsmith family at that auspicious date—hence the very natural mistake. A good many years have now elapsed since I recorded the well-established local tradition —far more reliable than the "copy" of the biographers—that Mrs. Goldsmith, in accordance with the universal practice of that part of the country (even down to the days of my own boyhood), in order to place herself under the most affectionate and most trustworthy supervision at the time of her approaching trial, had set out for her mother's residence near Kilmore, in the co. Roscommon. But the premonitory symptoms developed before the destined goal was reached; the patient was helped down from her pillion, and the future author of "The Vicar of Wakefield" first saw the light in the country homestead of a relative near the town of Elphin. My accomplished friend, the Right Hon. Michael F. Cox, M.D., subsequently investigated the question with the discriminating thoroughness which characterises his contributions to science and literature, and published his results in an exhaustive thesis.

It is interesting to note that the brilliant ornament of our profession whose name I have just quoted is himself a native of Roscommon—quite near to the actual birthplace of Oliver Goldsmith. So, too, was the late Surgeon-Major T. H. Parke, the Medical Officer of the ill-starred Emin Pasha Relief Expedition. Then but a few miles off will be found the birthplace of one of the most gifted and accomplished of living Irishmen, Dr. Douglas Hyde. As I was myself destined by fate to emerge on this terrestrial stage within the superficial limits of the quadrangle thus mapped out, I hope to be pardoned for taking the opportunity of seeking a little momentary illumination by reflected light. Anyway, it must, I think, be admitted, even on the above evidence, that Roscommon has not failed to furnish its quota of the names which have secured permanent places in the niches of the Temple of Fame. This fact I wish to emphasise—all the more gladly, too, inasmuch as there has been no part of Ireland—and, indeed, few of the world—subjected to more deliberately grinding oppression and injustice. It was one of the special foci of the radiant activity of another Oliver, whose name and fame will always furnish a gruesome contrast to those of our beloved Goldsmith. When Cromwell passed his heavy and long-toothed harrow over the fields of verdant Roscommon, he appointed, from the ranks of his "Ironsides," two permanent official hangmen; for the maintenance of "law and order," and the administration of "justice." He endowed each with extensive abbey lands: one with those of Cloonshanville (near Frenchpark), where the recipient (Davis) utilised for the necessities of his office the horizontal branch of a roadside oak, not too far from his mansion—which, where deeply notched by the friction of the rope in its long years of service, gave way and was blown down one stormy day (within living memory) and fractured the skull of a passing peasant; the other (Ormsby), who was much more sympathetically active in the discharge of his duty, erected a gallows on his lawn at Tubberavaddy, where he enjoyed the extra delight of exhibiting his skill and patriotic energy to his family and household; and where "his first act of grace" was "to attack and surround the Abbey of Fuerty in this neighbourhood, put the inmates to death, and possess themselves of all that was portable in and about the sacred edifice." But the bright side of that gloomy picture now stands revealed in the fact that few parts of the British Empire have shed more of their best and bravest blood in the great common cause during the present destructive war. This fact should surely give special and very solid grounds for anticipation of a brighter and better future for Ireland, and a higher and a holier hope for the progress of the future generations of the human race.

I am, Sir, yours truly,

JOHN KNOTT.

Dublin,
January 20th, 1916.

[It is hardly necessary to mention among recent celebrities that Lord French, though born in England, is by descent a Roscommon man; moreover, he takes the name of "Highlake" in his title from that county.—ED. M.P. and C.]

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I am so pleased my paper has been noticed by Dr. McMillan, and I thank him for mentioning Dr. Carlyle. He deserves a place in my Valhalla! Of course, there are several men I should like to have included in my list, but I feared to become boresome. In the periods I selected, there are, in case anyone should feel interested, Aiken, Arm-

strong, Sir Wm. Browne, Cowley, Grainger, Mason Good, Hamry, Harrington, Jurin, Jebb, Leyden, Sir Wm. Petty, Caleb Parry, Pettigrew, John Phillips, Sir Hans Sloane, and Philip Smiles—in alphabetical order. I wish someone would write a paper on them to supplement mine. A good many men have left their names in medicals annals for their medical literary work, but they can hardly be called "men of letters." The present Lamente must have justice done him in both capacities by some future scribe. As a matter of fact, most of us live in hopes of a good obituary notice!

I am, Sir, yours truly,
W. H. Maidlow, M.D., F.R.C.S.

Ilminster,
January 28th, 1916.

DIET AND THE CARE OF CHILDREN'S TEETH.

To the Editor of The Medical Press and Circular.

Sir,—On the subject of dental caries more nonsense has been written than on any other within the range of human pathology. Up to about forty years ago most of this rubbish was imported from the United States. American dentists before that time were very imperfectly educated, generally and scientifically. This did not prevent great numbers of them from becoming consummate masters of their handicraft with enough knowledge to enable them to make the simple diagnoses called for in treatment of the teeth. Those who wrote about dental diseases addressed an audience less well informed than themselves, and no authoritative criticism was in action. I took the trouble to go laboriously through the mass of literature which emanated from the most prominent of these writers, and I had no difficulty in showing by copious citations that this was often worthless or incomprehensible owing to neglect of the common rules of grammar and the introduction of pseudo-scientific jargon with an invented corresponding terminology. I imagined that the manufacture of this kind of stuff either abroad or at home had been put an end to; but it seems that there are still to be found asserting themselves writers who put forth speculations entirely incompatible with demonstrated and easily demonstrable physiological facts. The nature of caries was made clear more than fifty years ago by Sir John Tomes. He was the first investigator armed with adequate knowledge to go exhaustively into the subject. He began by making clear the histological qualities of enamel and dentine. He showed that these tissues contained no physiological elements capable of carrying on vital or morbid processes; that they could be influenced only by agents acting upon them from without, and "therefore dental caries could not in the proper sense of the word have any pathology." Tomes's views were confirmed by all later investigators having any valid claim to authority. Among these Wedl, formerly Professor of Pathology at Vienna, was the most distinguished. He followed Tomes over the whole ground and fully confirmed his opinions. But in truth, any intelligent third year's student can demonstrate the histology of the dental tissues for himself. By slowly dissolving enamel he can see that it is merely a calcareous mass devoid of organic elements; and he can satisfy himself of the absence of any similar elements in dentine, with the exception of the minute fibrils which occupy the tubules. The predisposing causes of caries are inherent structural defects in enamel; irregularities and crowding of the teeth, which give rise to lodgment of particles of food, and vitiation of the secretions in ill-health, which favour decomposition of such particles. Any attempt to improve the quality of the tissues after the crowns of the teeth are formed must be futile, and any such attempt after the teeth are erupted can only be characterised as absurd. Whatever helps to give a child "a good constitution" should give him good teeth, and a mother free from hereditary disease, healthy, strong, and well nourished is likely to produce offspring of the right quality. No special food or drugs can do anything for the developing teeth after their crowns are calcified. The early dates by which this is effected are stated in the text-books. A diet which calls for the exercise of mastication must tend to produce well-formed jaws; but when the teeth are crowded owing to ill-development of the maxillæ the only effective treatment is the extraction of a sufficient number of teeth to allow of the spreading apart of the rest of the set. The rules which should guide this operation are set down in the text-books. In these works will also be found an account of dental hygiene—the methods by which perfect cleanliness of the teeth many be insured.

I am, Sir, yours truly,
H. S.

January 27th, 1916.

FUNCTIONAL NERVOUS AFFECTIONS.

To the Editor of The Medical Press and Circular.

Sir,—There seems to be a prevalent belief amongst the medical profession that Christian Science practice is a form of suggestion, according to the statements made by Dr. T. A. Williams in his lecture reported in your issue of January 19th. This is not the case, however. Suggestion is a system based wholly on the exercise of the human mind, and as this human or carnal mind contains within itself all evil, it has not the capability of producing anything really good or Godlike. Good can only proceed from God, the infinite Cause of all that is good, and not from that which St. Paul terms "enmity against God."

To understand Christian Science healing, one must discern the line of distinction it draws between the absolute and the relative. When Jesus declared, "Ye shall know the truth, and the truth shall make you free," He, of course, referred to the absolute Truth, that which is the same yesterday, to-day and for ever. The study of Christian Science enables one to understand this truth, which is the sole cause of Christian Science healing. It was always something that Jesus knew, never anything He blindly believed, that enabled Him to heal the sick and sinning and to raise the dead. He did not heal through suggestion, but, as He Himself declared, by the finger or Spirit of God. That He expected His followers to heal by His method is evidenced by His declaration, "He that believeth on me, the works that I do shall he do also."

I am, Sir, yours truly,
Charles W. J. Tennant.

Talbot House, W.C.

[As our correspondence columns are always open to anyone who wishes to make a suggestion, to correct a misrepresentation, to comment upon a proposition, or to preach a gospel, we gladly publish the above. We will not insult the intelligence of our readers by pointing out the confusion of thought displayed in the above.—Ed. M.P. and C.]

Mr. Leopold F. Davies, of Herringswell, Suffolk, bequeathed £3,000 to the National Hospital for Diseases of the Heart and Paralysis, Soho Square.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Medicine.

Meeting held Friday, December 10th, 1915.

Sir J. W. Moore in the Chair.

TWO CASES OF WELL MARKED MYELOGENOUS LEUKÆMIA.

Dr. Parsons showed two cases of the above, both men of about thirty-five years of age. One had received prolonged treatment with benzol, having consumed about 1½ quarts of the drug in the previous 1½ years. The result in this case was most disappointing, in that no result was apparent except a gradual progress of the disease, the white cells having considerably increased in number and the spleen become much larger. Dr. Parsons said that this was in accordance with his experience of previous cases, in whch he had seen merely a temporary improvement. He regarded benzol as useless in the treatment of this disease, and the case was now having a course of X-rays. He noted that both these cases were passing a normal amount of uric acid. Previous cases had given a similar estimation, and he questioned the accuracy of the statement that the uric acid output is increased in myelogenous leukæmia.

ABDOMINAL ANEURYSM.

Mr. W. I. de C. Wheeler exhibited a case of a man on whom he had operated five years ago. The case was shown at that time in conjunction with Dr. Lumsden. Operation consisted in wiring by Colt's method. The man had worked hard since, and was free from symptoms. A pulsating mass could still be felt, but pulsation was not expansile and the bruit had disappeared. He considered the case cured.

Dr. Walter Smith congratulated Mr. Wheeler on the successful result, and confessed that when he saw the case five years ago he did not anticipate it.

Dr. Kirkpatrick asked if any expansile pulsation was visible on screen examination.

Dr. Hayes, who had X-rayed the case on several occasions, said that he was under the impression that expansile pulsation had entirely disappeared, and that the shadow had become much denser, indicating consolidation of the clot.

RODENT ULCER ON THE RIGHT ALA NASI.

Dr. O'Brien showed (1) a man sixty-eight years of age, who had suffered from the above for sixteen years. He was treated with radium bromide—twenty-nine exposures, extending over three and a half months, varying from fifteen minutes to three hours—causing complete healing of the ulcer, with a sound, pliable cicatrix. (2) A woman of thirty-five years of age, with a similar condition of three years' standing. This case was also cured by radium bromide after fourteen exposures.

Dr. Kirkpatrick asked whether histological examination of the ulcers had been made.

Dr. Drummond asked for an expression of opinion as to the relative merits of radium and X-rays in these superficial cases.

Dr. O'Brien, in reply, said that histological examination had been made in the first case and pronounced positive. He had not done so in the other case in order to avoid deformity as far as possible. He admitted that considerable difference of opinion existed as to the relative merits of X-rays and radium in these cases, but he considered radium preferable for the deeper lesions or in positions like the canthus of the eye or where gland involvement had occurred.

PSORIASIS.

Dr. O'Brien showed a case of above in a child two and a half years of age, whose mother and grandmother had suffered from the same disease. He emphasised the rarity of psoriasis before the age of five years, and also the distinct heredity. The eruption, which was dry, scaly and papular, involved the knees, elbows, arms, legs and backs of hands. The chest and scalp were quite free.

Dr. Walter Smith thought that a number of these cases were really seborrhœic eczema, and the appearance of some of the spots in this case inclined to that diagnosis.

Dr. O'Brien said that he had borne this possibility in mind, but had come to the conclusion that the eruption was psoriasis.

TWO SUCCESSFUL CASES OF OPERATION FOR MALIGNANT DISEASE OF THE STOMACH.

Dr. Parsons, in conjunction with Mr. G. Jameson Johnston, read a paper on the above subject. (1) J. K. was admitted to Baggot Street Hospital nine and a half years ago with signs of pronounced anæmia. On examination a distinct tumour was felt in the epigastrium. Stomach contents contained some blood and no free hydrochloric acid. A diagnosis of malignant disease was made. Mr. Johnston operated and removed the pyloric growth, which was examined by Dr. Wigham and pronounced to be carcinoma. The man has since remained in good health, and wrote recently to say he had just been married. (2) T. W., age 63 years, was admitted two and a half years ago, with gastric symptoms, which had developed some little time previously. An epigastric tumour was felt, with an absence of HCl in stomach contents. Pylorectomy and gastro-entrostomy were performed, and the growth found to be malignant. He kept well till quite recently, when he was admitted to hospital with "cramps in the stomach" and obstinate constipation. Masses could be felt scattered through the abdomen, and a diagnosis of secondary malignant deposits was made. *Post mortem:* No trace of malignant disease was found, but a condition of chronic peritonitis, the cause of which was quite obscure.

Dr. Kirkpatrick commented on the unusual success of these cases where a palpable tumour existed. He had previously considered it necessary to get the case before any tumour could be made out. He asked whether any cause could be suggested for the peritonitis in the second case.

Mr. Wheeler said that although the operative mortality in gastric cancer was low, 80 per cent. of the cases in this country recurred, mainly because they were not seen early enough. He considered loss of weight and appetite, with gastric stasis, in a patient of the cancer age to be strongly suspicious signs. Removal of the growth should be attempted even in advanced cases, when a year or so of comparatively comfortable life could be anticipated.

Dr. Matson enquired whether any signs of arterio-sclerosis were present in the second case, as this might account for the peritonitis. With regard to gastric stasis he had recently seen a case of gastric cancer in which this sign was absent.

Dr. Parsons said the diagnosis in these cases was easy on account of the palpable tumour. The glands removed from the lesser curvature were free from secondary deposits. He quoted Mayo's figures that a 90 per cent. chance of recovery from the operation existed in gastric cancer, a 35 per

cent. chance of life for three years, and a 25 per cent. chance of life for five years. The second case presented no symptoms or signs of arterio-sclerosis, but he was quite unable to assign a cause for the peritonitis, and hoped to exhibit the specimen later at another section. The absence of free HCl was a very valuable sign, and though it might be absent in many other types of disease, he had found it present in only one genuine case of gastric cancer.

THE ROYAL SOCIETY OF MEDICINE.

Section for the Study of Disease in Children.

Meeting held Friday, January 28th, 1916.

The President, Dr. Robert Hutchison, in the Chair.

Dr. J. D. Rolleston (for Mr. Sidney Stephenson) showed a case of dyspituitarism in a girl, æt. 15. She was brought to the ophthalmic department with the complaint that the sight had been failing for three or four months, and that for one week she had suffered from headaches. Right vision, 5/5 J.1.; left vision, 5/36 J.1.; weak atropine drops (1 gr.) were prescribed, to be used to each eye three times a day, and when the girl was examined the following week she was found to have in the right eye + 0.5D. cyl., axis 180°, and in the left eye + 0.5D. sph. A note was made to the effect that the media were clear. On August 27th, 1914, the sight of the right eye had become reduced from normal to "shadows," while that of the left eye remained as it was on admission some seven weeks before—namely, 5/36. The sight of the right eye was stated to have failed suddenly two weeks ago. The pupil of that eye had lost its direct response to light. The media were clear. Both optic discs were pale, but the retinal vessels were of normal dimensions. The girl's personal appearance was somewhat peculiar, since she was inclined to stoutness and her eyes seemed rather prominent. For closer observation the patient was admitted to the hospital on August 27th, 1914, and remained until the following October 24th. She was found to be a bright, intelligent, and good-natured girl, whose every movement appeared to be normal. There was no tremor or alteration in sensation. The facial movements were normal, and there was no nystagmus. The functions of all the cranial nerves, with the exception of the second, were normal. During her stay in hospital there were occasional headaches, but no vomiting or vertigo. An examination of the blood, conducted a few days after admission, gave the following results:—Red blood corpuscles, 3,770,000; white blood corpuscles, 6,400; hæmoglobin, 65 per per cent.; index, 0.86. The differential count was: Neutrophiles, 55; basophiles, 1; eosinophiles, 2; large lymphocytes, 9; small lymphocytes, 29; hyaline, 4; total, 100. The knee-jerks were brisk; there was slight ankle-clonus. Flexor-plantar response. The abdominal reflexes were present; the reflexes of the upper arm were easily elicited. No jaw-jerk. No facial irritability. The Wassermann reaction negative as regards both the blood serum and the cerebro-spinal fluid.

The girl was next seen on May 13th, 1915, that is to say, after an interval of almost nine months, when sight remained much as it had been on the date of the last note. The optic discs were pale, with no evidences of antecedent neuritis. The retinal vessels were of good size. The field of vision of the right eye could not be taken, but that of the left eye, estimated for a small white object, was restricted in the temporal region, although tolerably full elsewhere. On June 17th, 1915, she was placed on thyroid, 1 gr. twice a day. A negative report was received at about this time respecting an X-ray examination of the patient's skull.

September 9th, 1915: Right vision, perception of light; left vision, 3/60. Dose of thyroid increased to 4 gr. a day.

October 7th, 1915: Left vision, 3/60, No. 20 J.

December 4th, 1915: The bright and intelligent girl has a peculiar personal appearance, and is something more than merely well nourished. Her eyes convey the idea of prominence, and the left eye turns slightly outward and upward. Although within a few weeks of 15 years of age, no signs of menstruation have yet made their appearance. No headache, vomiting or vertigo. Pupils 6.5 mm. in diameter. Direct action of the right eye almost lost, while that of the left one is as yet almost intact. A very slow hippus is present. The optic discs are pallid, well-defined, and the physiological cups are not filled in or concealed in any way. Retinal vessels of good size. The visual field of the left eye, as tested for a 10 mm. white square, is entirely confined to the nasal half. The fixation point is as yet intact. Right vision, ? perception of light; left vision, 1/24 (letters) and No. 18 J. (letters).

A report from Dr. Williams, radiographer to the Queen's Hospital, states: "The sella turcica is greatly enlarged, the antero-posterior diameter being 17 mm. There appears also to be some thinning of the clinoid processes."

Dr. T. R. Whipham showed two cases of hypertrophic cirrhosis of the liver.

Case I.—A boy, æt. 9, was brought to hospital on Nov. 24th, 1915, with a history of jaundice during the previous three weeks. He vomited at the outset of the jaundice, but had no further nausea until just before he was seen. For the same time he had been getting thinner and had lost his appetite and spirits. The urine had been dark coloured and the motions light "like putty." There was one younger brother in the family, who is healthy, and between him and the patient the mother had had one miscarriage. When first seen the boy was well nourished and presented a general icterus of moderate severity. There was no irritation of the skin and the pulse was not diminished in frequency. The liver was greatly enlarged, extending to within 1¼ in. from the umbilicus, and was firm and uniform to the touch. There was no enlargement of the spleen or of the lymphatic glands. The thoracic viscera were normal. A blood count showed red corpuscles 4,500,000, white cells 6,000 per cubic millimetre; the hæmoglobin value was 100 per cent. The urine contained much bile-pigment, and the bowels were constipated. The Wassermann reaction was negative. Treatment with calomel and salines brought about a gradual diminution in the jaundice, and at the present time no coloration was visible. The liver, however, remained approximately the same size.

Case II.—A boy, æt. 6, attended hospital on Jan. 10th, 1916, on account of jaundice of ten days duration. He was said to have been getting thinner and to have lost his appetite. He had had no pain, but had vomited once on Jan. 9th. The urine had been of a dark colour, but, according to the mother's definite statement, bile had never been entirely absent from the stools. The patient has one brother who was healthy and there had been no miscarriages. The boy showed a marked icterus of a deep yellow colour, rather more intense than that in Case I. He had no itching of the skin and the pulse was not slow. The liver was very

similar to that of the first case, but was a trifle larger in proportion, the lower edge being felt within ¾ in. from the umbilicus. In this case also there was no enlargement of the spleen nor of the lymphatic glands, nor any abnormality in the thoracic organs. The blood count likewise resembled that in the former case, the red corpuscles numbering 4,500,000 and the leucocytes 10,000 per cubic millimetre, while the hæmoglobin value was also 100 per cent. The urine was deeply pigmented with bile, but the fæces had not been observed. The Wassermann reaction was negative. The patient had been treated with calomel, but the deep jaundice still persisted and the liver had not altered in size.

Dr. J. L. BUNCH showed a case of papillomatous growths in old operation scar.

The boy, æt. 13, was operated on eight years ago for a fatty tumour on the left side of the chest. Some months after the scar had healed, small reddish growths began to appear on and around the scar, and such growths have recurred intermittently ever since. There were now about a dozen of these growths which were soft, sessile and red to purplish in tint. Under the microscope they had a definite papillomatous character, with a well-marked cortex. No tubercle bacilli had been found in them, and von Pirquet's reaction was negative. There was nothing abnormal in the lungs.

Dr. J. L. BUNCH also showed a case of multiple tumours of molluscum contagiosum.

The patient, a girl, æt. 13, had a number of typical molluscum contagiosum tumours on both arms. One or two had undergone degeneration. They had been present about a month.

Dr. J. L. BUNCH also showed a case of chronic patchy dermatitis.

The girl, æt. 11 months, had a number of scattered erythematous patches on the trunk and thighs. These patches appeared soon after birth, the first one being on the side of the neck, and had gradually increased in numbers. No patch which had once made its appearance disappeared again, but after some weeks or months it developed a yellow tint which persisted. No patch was definitely scaly, but some of the earlist ones showed a slight roughness of the skin, the recent patches being quite smooth.

Dr. C. O. HAWTHORNE showed a case of double optic neuritis in a girl, æt. 7. She enjoyed good health until Christmas, when she vomited on two or three occasions in the early morning and before breakfast; also some complaint of headache, but she was never regarded by her mother as in any sense seriously ill. As the vomiting was repeated on several occasions, the doctor advised admission to hospital. She was bright and cheerful, and made little or no complaint; double optic neuritis was marked but there was no other evidence of nervous disease, though a degree of alternating convergent squint; vision 6/6 each eye. Cerebro-spinal fluid negative; Wassermann's test (?). No evidence of visceral disease.

Dr. C. O. HAWTHORNE also showed a case of solid œdema.

The patient, a girl, æt. 15, six years ago fell and cut her left leg below the knee; the limb became red and inflamed and she was confined to bed for a month. Two years later the limb was noticed to be swollen, and this condition had persisted, or even increased, to the present date. There was pitting on pressure over the dorsum of the left foot, and the soft tissues of the left leg and of the lower thigh were thickened but without evidence of dropsy. The left calf had a circumference greater than the right by 2½ in., while 5 in. above the upper border of the patella the left thigh measured 19½ in., and the right 16½ in. The limbs were of equal length, and skiagrams showed nothing abnormal in the left tibia or fibula.

Dr. THURSFIELD showed a cardiac case for prognosis.

The patient, a girl, æt 13, had had four attacks of chorea: the first in 1912, the last in May, 1915. She now had her cardiac impulse 1 in. outside the left nipple line with some dilatation of the right side, and systolic and early diastolic murmurs. The chief feature of the case, however, was the pulse irregularity, which varied considerably, but was, according to the electrocardiogram, due to ectopic contractions of the right ventricle. The cardiac affection did not seem to have checked her growth. She now weighed 7st. 11lb. in her clothes, and was unusually muscular and big for her age.

Dr. CAUTLEY showed a case of tumours over manubrium and in left calf in a male infant aged 15 months, whose mother had died 12 months ago from tuberculosis.

Dr. E. C. WILLIAMS showed a specimen heart showing infiltration by large round-celled sarcoma, probably originating in the sternal periosteum, from a boy, æt 8, with a history of eight weeks' illness, with pain in left side, cough, cyanosis, and orthopnœa. There was an increased area of cardiac dulness, apex beat diffused, sounds muffled, no distinct murmur; later there was friction heard over the sternum, also pleural friction left side.

Post mortem the anterior mediastinum was filled with a white hard growth adherent to the sternum, invading the visceral and parietal layers of the pericardium, rendering them indistinguishable and encasing the heart in a bony hard pericardium. The heart muscle was also invaded. Section of growth by Prof. Walker Hall showed it to be a large round-celled sarcoma.

Dr. ERIC PRITCHARD showed a specimen of congenital double hydro-ureter. Both ureters were greatly enlarged, with double hydronephrosis; at the autopsy they were found to be full of thickly purulent urine. The kidney substance was reduced to a shell, and the ureteral openings of the ureters into the bladder were greatly stenosed. The bladder was enlarged and the walls hypertrophied; the urethral orifice appeared normal.

The patient, a girl, æt. 12, was admitted to the Queen's Hospital for incontinence of urine and ingravescent drowsiness. She appeared to have had good health till within a year of admission, when symptoms of incontinence commenced. Four days before admission pus was discovered in the urine with albuminuria, and the child complained of a sensation of cold down the back. On admission, the child was in a comatose condition, and breathing was slightly stertorous. There was a large, rounded swelling in the abdomen, which extended to the umbilicus. The child had a strong smell of urine and incontinence was continuous. The temperature was normal, the pulse and respirations regular; the blood tension was 125 mm. Hg. The fundi were normal. The urine contained a large amount of pus, with a large number of staphylococci and a few coli bacilli. The uræmic symptoms gradually increased, and the child died four days after admission.

Dr. J. PORTER PARKINSON read a short paper on "Nephritis without Albuminuria following Pneumonia in a Boy, æt. 3½."

A DONATION of 1,000 guineas to endow a bed has been made to the King Edward VII. Hospital, Cardiff, by Messrs. Watts, Watts and Co., coal-owners. The hospital has received four gifts of a like amount from various donors in the past month.

THE NEW LONDON DERMATOLOGICAL SOCIETY.

Meeting held Thursday, January 13th, 1916.

The President, Dr. A. Eddowes, in the Chair.

Cases.

Dr. Vinrace exhibited a middle-aged man for diagnosis. He was under care for circinate patches seven years ago. The wife of the patient had tinea circinata on her cheek, and Sir Jonathan Hutchinson ascertained that the husband also had a rash, and that she had probably received the contagion from him. From scrapings submitted, Dr. Wyatt Wingrave concluded that tinea was present. The condition rapidly left the female patient, without leaving any trace; but the man still had an eruption.

The members present were unable to find traces of tinea and thought the rash was becoming lichenised.

Dr. Sequeira exhibited a woman patient whom he showed last October as a case of *lupus erythematosus,* so that members could see the result of treatment—viz., 5 grs. ichthyol thrice daily, in capsules. To the face in the daytime had been applied ichthyol ointment, and at night a gutta percha plaster of carbolic and mercury. There had been a very thick crust all round the margin, and very definite infiltration.

Dr. Sequeira was congratulated on the result.

Dr. Samuel exhibited a woman, who that day had been sent by the gynæcologist at the hospital for diagnosis. The rash broke out after an operation on the genitalia. It was on the chest and back. She had not been taking any drug, or had any injections. He believed it to be *pityriasis rosea.* As she was about to go to a nursing home he was having her blood examined to be sure there was no contagion.

Those who took part in the discussion agreed in the diagnosis and in Dr. Samuel's statement that few such cases had appeared during the last few months.

Dr. Eddowes showed a young woman, a widow, with a rash on the arms and face. She said she would not have thought much of the rash if it had not lately appeared on the face. She stated she had had a symmetrical rash on the arms and hands for five years. It was of deep red colour. The palms looked shiny and dry and somewhat inclined to crack. The rash was sharply defined at the edge, though irregular in outline and slightly scaly, and it itched a good deal. There was a large macular patch on the right side of the mouth, and she had stomatitis. She also had goitre and a very rapid pulse, and was much subject to rheumatism. No other member of the family had had swollen neck. Wassermann reaction was definitely positive. She had one living child, who suffered nervously; she had a bad miscarriage 15 years ago. He thought the eruption on the hands might come into the erythrodermia class; some would call it parapsoriasis, and others a parakeratosis. Bearing in mind the history, it seemed that the whole of her eruption might be syphilitic.

Dr. Sequeira considered the case to be specific, because of the definite infiltration. There was very little of the latter in parapsoriasis. He asked whether she had had any antisyphilitic treatment.

Dr. Samuel said he thought the affection of the hands was chronic dermatitis, not specific. If the latter, it would probably be a late syphilide, and the symmetry was against that idea.

Dr. Mack asked whether the affection would have remained in the same condition for five years if it were a tertiary syphilide.

Dr. Eddowes replied that the patient had not had any treatment for years. He regarded Dr. Mack's question as a very important one. He did not think the lesions would have remained on the hands as they were if due to syphilis only.

Dr. Vinrace showed a middle-aged man who had psoriasis on his elbow 17 years ago, and during the last fortnight had developed a very acute outbreak. He did not think he had ever seen a case develop so rapidly. The man believed his mother had psoriasis from 16 to 32 years of age, and that his grandfather, who was still alive, aged 86, had it now. The man said that all the small papules had come out within 24 hours. At times there was violent itching.

Dr. Samuel said he had seen a few similar cases. They were observed more frequently in children. He was interested in the statement that the condition itched, because patients in whom it came out acutely nearly always complained of itching.

Dr. Mack said he remembered seeing a very acute case in which lesions came out nearly all over the body in a week. It was in a child, and was shown before the Royal Society of Medicine.

Dr. Samuel showed a case of syphilitic disease of the tongue. The patient was a young woman, who presented a condition of the tongue not often seen in the early stages of the disease. She had had a typical secondary body rash. After one intramuscular injection of galyl the tongue had improved a good deal and the rash disappeared. There was neither evidence nor history of a primary sore.

The President asked whether the sore on the tongue might not be the primary lesion; it seemed to be punched-out.

Dr. Samuel replied that it was difficult for him now to speak dogmatically about the tongue because the ulceration was originally very much deeper than at present.

Other cases were shown, two of them being of special interest:—

1. A case in which the diagnosis lay between *atrophic lichen planus* or a *syphilide*, exhibited by Dr. Samuel.

2. A case of syphilis in which were lesions of an unusual type during the secondary stage, shown by Dr. Vinrace.

LIVERPOOL MEDICAL INSTITUTION.

At the ordinary meeting held on January 27th, the following resolution was proposed by the President (Dr. Charles J. Macalister), seconded by Professor T. R. Glynn, and carried with acclamation:—

"That the congratulations of the members of the Liverpool Medical Institution be tendered to Captain Noel G. Chavasse, R.A.M.C. (T.), 10th (Scottish) Battalion King's Liverpool Regiment, on the occasion of the Military Cross having been conferred upon him by His Majesty the King."

Captain Chavasse is an Associate Member of the Institution.

Mr. James Hill, M.P., has marked his unopposed return for the Central Division of Bradford by distributing 1,000 guineas among twelve philanthropic institutions of the city. The Royal Infirmary will receive £400, the Royal Eye and Ear Hospital £100, the Children's Hospital £100, and the Royal Institution for the Blind £50.

SPECIAL REPORTS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

WE are asked by the Registrar of the College to insert the following resolutions concerning the duties of medical practitioners in relation to cases of criminal abortion:—

The College is of opinion—

1. That a moral obligation rests upon every medical practitioner to respect the confidence of his patient; and that without her consent he is not justified in disclosing information obtained in the course of his professional attendance on her.

2. That every medical practitioner who is convinced that criminal abortion has been practised on his patient, should urge her, especially when she is likely to die, to make a statement which may be taken as evidence against the person who has performed the operation, provided always that her chances of recovery are not thereby prejudiced.

3. That in the event of her refusal to make such a statement, he is under no legal obligation (so the College is advised) to take further action, but he should continue to attend the patient to the best of his ability.

4. That before taking any action which may lead to legal proceedings, a medical practitioner will be wise to obtain the best medical and legal advice available, both to ensure that the patient's statement may have value as legal evidence, and to safeguard his own interests, since in the present state of the law there is no certainty that he will be protected against subsequent litigation.

5. That if the patient should die, he should refuse to give a certificate of the cause of death, and should communicate with the Coroner.

The College has been advised to the following effect:—

1. That the medical practitioner is under no legal obligation either to urge the patient to make a statement, or, if she refuses to do so, to take any further action.

2. That when a patient who is dangerously ill consents to give evidence, her statement may be taken in one of the following ways:—

(*a*) A magistrate may visit her to receive her deposition on oath or affirmation. Even if criminal proceedings have not already been instituted, her deposition will be admissible in evidence in the event of her death provided that reasonable written notice of the intention to take her statement was served on the accused person and he or his legal adviser had full opportunity of cross-examining.

(*b*) If the patient has an unqualified belief that she will shortly die, and only in these circumstances, her dying declaration will be admissible. Such a declaration may be made to the medical practitioner, or to any other person. It need not be in writing, and if reduced into writing it need not be signed by the patient nor witnessed by any other person, though it is desirable that both should be done, or that, if the patient is unable to sign, she should make her mark. If possible, the declaration should be in the actual words of the patient, and if questions are put, the questions and answers should both be given, but this is not essential. If the declaration cannot there and then be reduced into writing, it is desirable that the person to whom it is made should make a complete note of it as soon as possible.

OBITUARY.

EMERITUS PROFESSOR JOHN WYLLIE, EDINBURGH.

WE regret to have to record the death of Dr. John Wyllie, Emeritus Professor of Medicine in the University of Edinburgh. He took his M.D. with honours in 1865, with a gold medal for his thesis. In the same year he obtained the diploma M.R.C.S.Eng. After qualifying, he acted as Resident House Surgeon and Physician first in the Edinburgh Royal Infirmary, and then in the Birmingham General Hospital. He was long associated with the Extra-Mural School in Edinburgh, and held the various posts possible to a physician in the Infirmary. His contributions include "The Disorders of Speech," "The Physiology of the Larynx," and various papers in the Edinburgh Hospital reports. He was very highly esteemed as a consultant, and as a clinician he stood in high favour with several generations of students.

DR. WALTER H. B. MACDONALD.

IT was with regret that we noticed the death of Dr. Walter H. MacDonald, R.A.M.C., in Craigleith Hospital, on Saturday, 22nd ult., after a few days' illness, from appendicitis. He was a native of Lochaber, and practically from the year of his graduation, 1888, he has given his life to the Army service. He had the war medal and clasp for Witu, the clasp for Nivele, the Central African medal and clasp for Uganda, etc. He received a letter of thanks, and was presented with a sword by the Sultan of Zanzibar, who also conferred on him the membership of the Order of the Brilliant Star of Zanzibar in 1898. He offered his services at the outbreak of the present war and received a lieutenancy in the R.A.M.C. At the time of his death he was in medical charge of the troops of the Forth defence.

COLONEL C. STONHAM, C.M.G., F.R.C.S., LONDON.

WE regret to announce the death, which took place on 31st January at his residence, 4 Harley Street, London, W., of Colonel Charles Stonham, C.M.G., F.R.C.S., A.M.S., after a severe illness contracted while with the forces in Egypt. Colonel Stonham was aged 57. He was educated at King's School, Canterbury, and University College, London. There he was Aitchison scholar and gold medallist in medicine, obstetric medicine, and surgery. Formerly he was a member of the Board of Examiners in Anatomy, R.C.P. and R.C.S., and was Senior Surgeon at Westminster Hospital. Colonel Stonham, who served in the London Mounted Brigade Field Ambulance, R.A.M.C., was made a C.M.G. for his services in the South African War.

DR. W. D. MURRAY, M.B., C.M., R.A.M.C., LONDON.

THE death has taken place in London of Lieutenant William Dunmore Murray, M.B., C.M., R.A.M.C. Lieutenant Murray, who was 48 years of age, took his medical course at Glasgow University, qualifying M.B., C.M. in 1889, and afterwards proceeded to London, where he had been in practice in Clapham. On the outbreak of war he relinquished his practice to join the R.A.M.C., and he had been stationed at Colchester as a member of one of the Examining Boards. He is survived by his widow and two sons. His eldest son is at the front with the Northumberland Fusiliers.

NEW BOOKS AND NEW EDITIONS.

THE following have been received for review since the publication of our last monthly list:—

BAILLIERE, TINDALL AND COX (London).

Manual of Anatomy: Systematic and Practical. Including Embryology. By A. M. Buchanan, M.A., M.D., etc., etc. Third edition. Illustrated. Pp. 1,743. Price 21s.

Rhizopod Protozoa: The Cause of Cancer and other Diseases. Being Part IV. of "Protozoa and Disease." By J. Jackson Clarke, M.B.Lond., F.R.C.S. Pp. 187. Price 7s. 6d.

Sleeping Sickness. A record of four years' war against it in Principe, Portuguese West Africa. By B. F. Brnto Da Costa, J. Firmino Sant' Anna, A. Correia Dos Santos and M. G. De Coranjo Alvares. Published in Portuguese in "Archivos de Hygiene E Pathologia Exoticas." Vol V., March 30th, 1915. Translated by permission of the Lisbon School of Tropical Medicine. By J. A. Wyllie, F.R.G.S. (Three-coloured maps.) Pp. 260. Price 7s. 6d.

A Manual of Surgical Anæsthesia. By H. Bellamy Gardner, M.R.C.S., M.R.C.P.Lond. Second edition. Illustrated. Pp. 220. Price 7s. 6d.

BALE, SONS AND DANIELSSON, LTD. (JOHN) (London).

The Triangular Bandage. By Howard M. Preston. With introduction by James Cantlie, M.A., M.B., etc., etc. Pp. 62. Price 1s.

Churchill, J. and A. (London).
Southall's Organic Materia Medica. Eighth edition. Revised and enlarged by Ernest W. Mann, B.Sc.Lond., F.I.C. Pp. 390. Price 7s. 6d.
St. Thomas's Hospital Reports. New Series. Edited by J. J. Perkins and C. A. Ballance. Vol. XLII. Pp. 205. Price 8s. 6d.
The Primary Lung Forms of Tuberculosis in Children. By Dr. Athou Ghon. English edition. Translated by D. Barty King, M.D. Pp. 172. Price 10s. 6d.
A Code of Rules for the Prevention of Infectious Diseases in Schools. Issued by The Medical Officers of Schools Association. Seventh edition. Pp. 52. Price 1s.

Frowde, Hy., and Hodder and Stoughton (London).
Medical Lectures and Aphorisms. By Samuel Gee, M.D. With recollections by J. Wickham Legg. Pp. 408. Price 6s.
A Manual of Surgical Anatomy. By Lewis Beesley, F.R.C.S. Edin., and T. B. Johnston, M.B., Ch.B. Pp. 557. Price 12s. 6d.
Handbook of Massage for Beginners. By L. L Despard. Pp. 247. Price 6s.
Diseases of the Throat, Nose and Ear. By William H. Kelson, M.D., B.S., F.R.C.S.Eng. Pp. 270. Price 8s. 6d.

Hazell, Watson and Viney, Ltd (London).
Hazell's Annual for the Year 1916. Edited by T. A. Ingram, M.A., LL.D. Pp. 623. Price 3s. 6d.

Humphrey Milford (Oxford University Press) (London).
The Cures of the Diseased in Forraine attempts of the English Nation. London 1598. Reproduced in facsimile, with introduction and notes by Charles Singer. Price 1s. 6d.
The Pathology and Treatment of the So-called Nervous Asthma. By J. B. Berkart, M.D. Pp. 54. Price 2s. 6d.

Kimpton, Henry (London).
Notes on Military Orthopædics. By Paul Bernard Roth, M.B., F.R.C.S. Illustrated. Pp. 56. Price 1s.

Lewis, H. K., and Co., Ltd. (London).
Amnesia and Analgesia in Parturition (Twilight Sleep). By Alfred M. Hellman, B.A., M.D., F.R.C.S. Pp. 197. Price 6s. 6d.

Livingstone, E. and S. (Edinburgh).
Wheeler's Handbook of Medicine. By William R. Jack, B.Sc., M.D., F.R.F.P.S.G. Fifth edition. Pp. 552. Price 8s. net.
Back Injuries and Their Significance under the Workmen's Compensation and Other Acts. By Archibald McKendrick, F.R.C.S.E., etc. Pp. 173. Price 2s. 6d.

Longmans, Green and Co. (London).
In a French Military Hospital. By Dorothy Cator. Pp. 99. Price 2s. 6d.

Lippincott, J. B., Co. (London).
Simplified Infant Feeding. By Roger H. Dennett, B.S., M.D. Illustrated. Pp. 355. Price 12s. 6d.

Macmillan and Co., Ltd. (London).
Diseases of Nutrition and Infant Feeding. By John Lovett Morse, A.M., M.D., and Fritz B. Talbot, A.B., M.D., Pp. 246. Price 10s 6d.

"Prescriber, The," Offices (Edinburgh).
Incompatibility of Prescriptions and How to Avoid It. By Thomas Stephenson, Ph.C., F.R.C.S. Pp. 32. Price 1s. net.

Putnams, G. P., and Sons (New York and London).
A Quiz Book of Nursing. By Amy Elizabeth Pope and Thirza A. Pope. Pp. 482. Price 7s. 6d.
Text Book of Anatomy and Physiology for Nurses. By Amy E. Pope. Pp. 596. Price 7s. 6d.

Thacker, Spink and Co. (Calcutta).
Tropical Hygiene for Residents in Tropical and Sub-Tropical Climates. By the Hon. Surg.-Gen. Sir Pardey Lukis, R.C.S.I., V.D., and Lt.-Col. R. J. Blackham, C.I.E., R.A.M.C. Third edition. Revised and enlarged. Pp. 302. Price 3s.

Whitaker's Almanac (London).
Whitaker's Almanac, 1916. Pp. 858. Price 2s. 6d.

Medical News in Brief.

Medical Sickness and Accident Society.

At the ordinary monthly meeting of the Executive Committee of this Society, Dr. F. J. Allan in the chair, it was found that the sickness claims for the month were up to expectation, but that for the whole year the total experience was below total expectation, and this notwithstanding that a large sum was paid to members invalided home from active service, a quite unusual risk and one not provided for in the tables on which the sickness expectation was based. The new proposals received were fewer in number than for the same month in the preceding year, and, in common with most insurance companies, it is not anticipated that this branch will show high figures in the coming year.

The figures for proposals for more sickness benefit from existing members continue to show good returns. The increase in the cost of locums appears to account for this to some extent.

The society still accepts members of the R.A.M.C. for limited amounts in sickness benefit and life assurance without extra premium.

It was resolved to form an investment reserve and to place to this account a sufficient sum to meet the depreciation in stock values. It is pleasing to report that this only amounts to £4,000.

The date of the annual meeting of the members was fixed for March 28th, and a notice to this effect was ordered to be placed in various medical journals.

L.C.C. Asylum at Epsom.

At a meeting of the London County Council on January 25th, the Asylums Committee reported that the Treasury had intimated that they were not prepared to approve of the continuance of the expenditure for the erection of the eleventh county asylum at Epsom. Steps had accordingly been taken to stop work on the buildings as early as possible. This had involved coming to terms with the contractors and the payment of £16,000 compensation for suspension of work. The work would be resumed one year after the declaration of peace, or earlier by arrangement.

It was stated that three-quarters of the building was already finished. Now it was costing the ratepayers £16,000 to get rid of a contract, and they would still have to find accommodation for the patients. This would cost far more than if the asylum was proceeded with until it was finished, which would have been in about nine months' time. If necessary, the Government could then have used it as a military hospital.

It was further observed that the report was not brought forward as an economical proposition. The Treasury was prepared to exercise the power they had to stop them paying for the work, on the ground that every pound of capital was wanted for the war. It was obvious that if the Council's capital was expended on the asylum the Treasury could not have it. The building was not suitable for hospital purposes.

The Council approved the report.

Infectious Diseases in Aberdeen.

The following is the return of cases of zymotic disease notified to the Medical Officer of Health for Aberdeen for the week ending Saturday, January 22nd, 1916:—Scarlet fever, 31; whooping-cough, 8; chicken-pox, 3; erysipelas, 1; puerperal fever, 2; pulmonary tuberculosis, 8; other tuberculosis, 2. Of the 64 cases thus notified, 36 cases, including 1 case of tuberculosis, are being treated within the City Hospital or other public institution.

Medical Students as Recruits.

In the House of Commons, on January 24th, Sir G. Parker asked the Under-Secretary for War if he would state what was the policy of the Government in regard to first and second year medical students in the field of recruiting; was he aware that an applicant had been refused by a responsible organisation, such as the Inns of Court Officers' Training Corps, on the ground that the applicant was a medical; was he aware that medical students who were willing to serve either as medical men or as soldiers were in a position of uncertainty and instability; and, if so, what was the course to be pursued in regard to this class?

Mr. Tennant replied: There has been no change in the policy regarding the first and second year students. I have frequently stated it in this House. The case referred to in the latter part of the question has not been brought to my notice. I may add that it is not contemplated that qualified medical men should be used as soldiers in the ranks.

In Aid of the Red Cross.

Mr. John S. Sargent has supplied a design for a Red Cross envelope which will shortly be on sale for the benefit of the funds of the Society. The design is every effective. The drawing shows two classic figures, one of a soldier, wounded but triumphant, being raised from a stretcher by the other, a nurse, and both are set white against the silhouette of a large red cross.

The Rev. E. M. Griffin, British Red Cross Hospital, Saideh School, Giza, Egypt, asks for table games, puzzles, and billiard balls for the patients.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Original Articles or Letters intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer not necessarily for publication, but as evidence of identity.

ISLINGTON'S LOW BIRTH RATE.

Dr. A. E. Harris, medical officer of health for Islington, reports that in the fourth quarter of last year the birth-rate fell to 21.05 per 1,000 inhabitants, the lowest rate hitherto recorded, the average for the corresponding ten years being 24.52.

A QUAINT WILL.

Surgeon-Major John O'Leary, I.M.S., of Curryhevern, Timoleague, co. Cork, who died at Ismailia, Egypt, on September 9th last, has left personal property of the value of £2,912. The testator gives £100 to his godson, "Blest if I can remember his Christian name, but I think it is Jas" Fitzpatrick, legacies to other relatives, and the residue, "after Lloyd George's death duties and the lawyer's death duties have taken their little bit," to his sister Margaret, desiring her to give some to the poor "(some deserving and some not) who lived near us."

SATISFACTORY FOR BOTH.

Sergeant (at recruiting office, cynically to recruit): "Come to join, eh? For the separation allowance, I suppose?"

Recruit: "Yes, sir! I wants the separation and she wants the allowance."—*The Bystander.*

THE CINEMA AND SCARLATINA.

In a report to the Dover Health Committee on a serious outbreak of scarlet fever, Dr. Gibson, assistant medical officer, states that he has traced many cases to cinema halls. He considered this to be due to the continuous darkness of the hall.

L. S. A. (Barking).—It is several years since the nomenclature was altered.

Section (Glasgow).—The book was reviewed in our columns two months ago.

Dr. J. B. (Oxford).—We are writing you direct.

Meetings of the Societies, Lectures, &c.

Wednesday, February 2nd.

Royal Society of Medicine (Section of Surgery) (1, Wimpole Street).—5.30 p.m.; Paper and Demonstration. Dr. F. Hernaman-Johnson: The Use of Condensers in the Diagnosis, Prognosis, and Treatment of Nerve Lesions. N.B.—Members of the Sections of Medicine, Neurology, and Electro-Therapeutics are specially invited to attend.

Royal Society of Medicine (Section of Ophthalmology) (1, Wimpole Street, W.).—8.30 p.m.: Papers. The Cause of the Ophthalmoscopic Appearances in Amaurotic Family Idiocy: By the late Mr. George Coats (to be read by Mr. R. Affleck Greeves). Mr. Holmes Spicer: Superficial Linear Keratitis. Short Communication.—Mr. Walter Edmunds: Cataract in Experimental Thyroidectomy. Cases.—Mr. J. Herbert Fisher: Arterio-venous Aneurysm. Mr. Harold Grimsdale: Dilated Retinal Vessels; and other Cases.

Royal Society of Arts (John Street, Adelphi, W.C.).—4.30 p.m.: Paper. Hon. Lady Parsons: Women's Work During and After the War.

Thursday, February 3rd.

Royal Society of Medicine (Section of Obstetrics and Gynæcology) (1, Wimpole Street, W.).—8 p.m.: Specimens. Dr. Herbert Spencer and Dr. E. A. Barton: Speculum-camera. Dr. Herbert Spencer: (1) Tubular Needle for Silver Wire; (2) Needle-holder for Pelvic Work. Short Communications.—Dr. Walter Salisbury: Three Cases of Labour obstructed by Ovarian Cyst. Dr. Francis M. Huxley: Fatal Rupture of Bladder in the Puerperium. Dr. M. Handfield-Jones: Chorion Epithelioma following Vesicular Mole. Paper.—A discussion on the "Clinical Aspect of the Double Uterus" will be introduced by the President, Dr. M. Handfield-Jones.

Friday, February 4th.

Royal Society of Medicine (Section of Laryngology) (1, Wimpole Street, W.).—4 p.m.: Cases. Will be shown by Dr. Dan McKenzie, Dr. Edmond, Mr. Lambert Lack, Dr. Stuart-Low, and others.

West London Medico-Chirurgical Society (West London Hospital, Hammersmith Road, W.).—8 p.m.: Pathological Meeting. Specimens will be shown by Major McAdam Eccles, Dr. A. Saunders, Mr. N. B. Harman, Dr. R. Morton, Dr. H. J. Banks Davis, Dr. Bernstein, Mr. Gray, Mr. Souttar, and others.

Royal College of Surgeons of England (Lincoln's Inn Fields, W.C.).—5 p.m.: Hunterian Lecture. Sir John Bland-Sutton: New Ulcers for Old—Jejunal for Duodenal Ulcers.

Monday, February 7th.

Medical Society of London.—9 p.m.: The first Lettsomiam lecture will be delivered on "The Effects of High Explosives on the Central Nervous System." By Major Fred W. Mott, M.D.Lond., Hon. LL.D.Edin., F.R.S.

Vacancies.

Bury Infirmary.—Senior House Surgeon. Salary £250 per annum, with board, residence, and washing. Applications to the Hon. Sec., Infirmary, Bury, Lancs.

Borough Hospital, Birkenhead.—Junior House Surgeon. Salary £170 per annum, with board and laundry. Applications to the Secretary.

Leeds Public Dispensary.—Lady Resident Medical Officer. Salary £130 per annum, with board, residence, and laundry. Applications to the Secretary of the Faculty, Public Dispensary, North Street, Leeds.

Bridgwater Hospital.—House Surgeon. Salary £125 per annum, with board, lodging, and washing. Applications to Edward Trevor, Hon. Sec., Bank Chambers, Bridgwater.

Manchester Northern Hospital for Women and Children, Park Place, Cheetham Hill Road, Manchester.—Lady House Surgeon. Salary £120 per annum, with apartments and board. Applications to Mr. Hubert Teague, Secretary, 38, Barton Arcade, Manchester.

Birmingham and Midland Eye Hospital, Church Street, Birmingham.—House Surgeon. Salary £200 per annum, residence and board. Applications to J. W. Pearce, General Supt. and Secretary.

Appointments.

Huey, J. M., M.B., Ch.B.Glas., Certifying Factory Surgeon for the Millom District. co. Cumberland.

Murphy, Geraldine, M.B., B.Ch., B.A.O.Dub., House Physician to the Chester Royal Infirmary.

Nash, Miss Amy F., F.R.C.S.I., House Surgeon to the Chester Royal Infirmary.

Births.

Cross.—On January 21st, the wife of Dr. H. R. Cross, Storthes Hall Asylum, Kirkburton, near Huddersfield, of a son.

Fisher.—On January 24th, at Shoreditch Infirmary, London, North, to Dr. and Mrs. Fisher, a boy (Adrian Welby).

Hall.—On January 24th, 1916, at The White House, Eastbourne, the wife of E. Wilson Hall, M.R.C.S., L.R.C.P., a daughter.

Lock.—On January 24th, at Herschel House, Cambridge, the wife of Norman F. Lock, M.A., M.B., F.R.C.S., Lieut., R.A.M.C., of Boston, Lincs., a son.

MacFadden.—On January 26th, at 20, Lymington Road, Hampstead, N.W., the wife of Arthur W. J. MacFadden, C.B., M.B., of a son.

Rambaut.—On January 25th, at Priory Cottage, St. Andrew's Hospital, Northampton, the wife of Daniel F. Rambaut, M.D., of a son.

Stewart.—On January 24th, at "Wiggenhall," Sevenoaks, the wife of Captain W. J. Stewart, R.A.M.C., a daughter.

Marriages.

Edmunds—Brown.—On January 29th, at King's Heath Parish Church, Surgeon W. H. Edmunds, R.N., to Dorothy Margaret, daughter of the late Mr. and Mrs. Herbert Brown, and sister of Harry S. Brown, 3, Valentine Road, King's Heath.

Hampson—Finnemore.—On January 28th, at All Saints' Church Four Oaks, Capt. Travis Hampson, M.B., R.A.M.C., S.R., elder son of Mr. and Mrs. W. Hampson, Lake Vyrnwy, Oswestry, to Alice Mary, younger daughter of the late Alfred Finnemore and Mrs. Finnemore, of Chesterton, Four Oaks.

Sutherland—Thomson.—On January 26th, by special licence, at St. Catherine's Parish Church, Merstham, Surrey, Major Donald Sage Sutherland, M.D. (Glas.), R.A.M.C.T., 1st City of London Field Ambulance, eldest son of the late Rev. Donald Sutherland, Rossie Lodge, Inverness, to Louise Mary Thomson, youngest daughter of Albert Sudbury Thomson.

Watt—Garle-Browne.—On January 25th, at Westminster Cathedral, James Watt, M.A., M.B., D.P.H. (Aberd.), to Dorothy Muriel, elder daughter of the late John Garle-Browne, Esq., Bufton Lodge, Desford, Leicestershire.

Deaths.

Carter.—On January 24th, at Marden Ash, Ongar, Surg.-Major Frederick Carter, I.M.S., in his 86th year.

Clark.—On January 23rd, at Bulawayo, Rhodesia, William Gladstone Clark, M.A.Cantab., F.R.C.S., aged 48 years.

Garrod.—Killed by shell in France, on January 26th, Alfred Noel Garrod, M.R.C.S., Lieut., R.A.M.C., 100th Field Ambulance, eldest son of Archibald E. Garrod, M.D., F.R.S., Colonel, A.M.S., and Mrs. Garrod, of 9, Chandos Street, W., and Wilford Lodge, Melton, Suffolk, aged 28.

Kirkwood.—On January 30th, at 1, North Street, Peterborough, George Kirkwood, M.D., aged 63 years.

Lovell.—On January 28th, at 62, Holmdale Road, West Hampstead, Francis Henry Lovell, Kt., C.M.G., F.R.C.S., LL.D., in his 72nd year.

Sanderson.—On January 23rd, at Joanville, Jersey, Colonel Arthur Sanderson, R.A.M.C., in his 82nd year.

Stonham.—On January 31st, at 4, Harley Street, Colonel Charles Stonham, C.M.G., F.R.C.S., A.M.S., after a severe illness contracted while serving with the Forces in Egypt.

White.—On January 27th, Thomas Henry White, Lt.-Colonel R.A.M.C., of "Coolgardie," Caversham, in his 79th year.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

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AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravants les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

Lord Derby on Re-examination.

IN a letter to a correspondent, which appeared last week in the daily Press, Lord Derby gives reasons for the further medical examination of those already rejected on medical grounds. The first of these reasons is a confession; the second is amusing; the third is conclusive. Here is the first: "Many men slipped through during the recent rush, and it would be unfair that men who are not entitled should wear an armlet on the strength of a medical certificate obtained without adequate examination." From all accounts the "slipping through" was done, not by the fit into freedom, but by the unfit into the ranks. The examining officers certainly have not erred on the side of lenity, with the result, as has so often been pointed out, that many men have been enrolled who are now a financial burden upon the taxpayer, and are likely to remain so. If it be the case that any slackers have escaped enlistment, then by all means let them be caught. It is nevertheless to be feared that any access or excess of zeal will only result in adding to the list of the uniformed unfit.

Rejection Papers.

THE second reason displays a certain ingenuity on the part of the physically disabled which must have required considerable astuteness to detect. "Again, cases are known where a man suffering from some permanent physical disability obtained a medical rejection paper, and then went to various recruiting offices and obtained further rejection papers, giving names of friends, to whom he sold the rejection papers. This practice was stopped by having the registration card stamped by the recruiting officer, but there are a certain number of these bogus rejection papers in existence." It is to be hoped that some, at any rate, of these vendors have been successfully laid by the heels, and that every one of the purchasers will be duly drawn into the net. The latter deserve punishment as much for their stupidity as for their lying cowardice. Having regard to the wide advertisement given to the way out via "conscientious objection," what on earth can be the object of participating in a fraud? A little snuffling cant is all that is necessary: it is much cheaper and much less risky than the purchase of a bogus rejection paper.

Conclusive.

THE third reason is really all that was necessary to convince any thinking person. Here it is: "A further reason is that, the standard having been considerably lowered recently for certain branches of the Army, many men who were formerly rejected are now required. Men who are physically fit can be released from clerical duties and replaced by men only fit for sedentary occupations. For example, a man with a cork leg would be quite unfit for active service; but, if he be a trained and experienced clerk, might be very, very useful indeed in a pay department, and could release a more active man for foreign service." That is quite reasonable; but, if this is true of the physically unfit, it also applies to the conscientious objector. There is evidently plenty of work for the latter to do without exposing his precious skin either to shrapnel or to the vaccination lancet. Why in the name of common justice and common sense is he not made to do it?

An Experience.

THAT the medical examinations in the past have not always been free from serious reproach is notorious. The experience of a correspondent of the *Manchester Guardian* is worth quoting. It is by no means unique. "I was rejected in November on two counts, both stated to be remediable only by operation. On January 17th I applied for my armlet as a 'reject.' I was told I must be re-examined. I agreed; was taken very hurriedly in a batch of six, and, after a most cursory examination, was certified fit for general service, with a clean bill of health. I mentioned the causes of the previous rejection, but was dismissed with the statement that I was 'not suffering from them now.' As I am about to be operated on for one of the defects which I am officially stated not to have, and as the other, of course, remains, the verdict, though cheerful, is somewhat grotesque. And since such carelessness in examination may obviously, in some cases, result in needless confusion and even in grave injustice, it may be worth exposing."

Army Sight Standard.

I SEE it stated in the *The Times* that in the matter of eyesight tests "the Army standards have often been called in question and nearly always in an ignorant manner." So far as the MEDICAL PRESS AND CIRCULAR is concerned, the adverse comments on the present tests have been addressed to us by some of the leading authorities, who have explained their reasons at considerable length and in such a manner as to carry conviction to anyone with any knowledge of the subject. (*a*) The writer in *The Times* goes on to say: "The question at issue is not whether a doctor thinks a man should be able to see this object or that, but whether he is actually capable of seeing distant objects which commanding and other officers demand that he shall be able to see. A moment's consideration of the work of artillerymen will reveal the obvious character of this requirement." This is quite true, and it is purely on utilitarian grounds that the present tests are condemned.

The Part of the Ophthalmological Society.

IN the next paragraph the writer is a little out of his depth: "These soldier-made standards have, it is true, been translated into medical terms and language. This was necessary. The work was undertaken by the Ophthalmological Society some time ago at the suggestion of Sir Alfred Keogh himself. The standards in use have therefore a double sanction, and no fears need be entertained either that they are not adequate or that they will not be applied justly and thoroughly." Now, the Ophthalmological Society appointed a committee in 1886 to advise the War Office on this question, and it is to be supposed that the recommendations of the former were adopted by the latter. But for the last thirty years the Ophthalmological Society has not moved in the matter, and it is very doubtful if it has ever been approached. The writer is mistaken in supposing that Sir Alfred Keogh has consulted the Society. Had he done so, there is not the slightest doubt that the peace-time tests, which were still operative after a year's war, would have undergone very drastic revision.

In a Nutshell.

THE whole question really resolves itself into this: Ought soldiers, either officers or men, to be allowed to wear glasses? The principle is the same in every army, and if the answer to such a question is in the negative, as in the case of the British Army it hitherto has been, then it is obvious that the German Army is working on a wrong principle. Glasses are admittedly a great inconvenience, but a man who sees well with glasses is obviously better than a man with defective eyesight who has no glasses. The British standards used to admit men of the latter class while refusing many who with the aid of suitable correction had perfectly normal vision. The correspondence to which I have already referred brought this point into great prominence. If it be granted that the exigencies of active warfare demand that glasses shall be allowed, then it matters nothing what the ocular defect is, provided that suitable correction ensures normal vision. That is evidently the principle which obtains both in France and Germany, even in times of peace.

(*a*) See Mr. Ernest Clarke's letter which appeared in our issue of June 16th, 1915, page 596.

Khaki Again.

ALTHOUGH, in deference to the friendly protest of a correspondent, I have agreed, myself, to give this subject a rest, I cannot refrain from publishing the following, which comes from the North:—"What need is there for the part-timers, serving in the military hospitals, to wear uniform? I have heard no reason given in its favour that is not foolish. A uniform is an assemblage of dry goods that needs to be lived up to, and the liver must be caught young. Some of our leading physicians and surgeons, decent lads, were by no means young when caught by the authorities and pushed into khaki. The combination is striking in some cases: think of a gentleman with Glasgow legs, of mixed calliper and Chippendale pattern, in khaki—or in kilts. And the beards—that the wives defy them to shave—wagging over tunics and Sam Brown belts, "bedropp'd wi' crimson hail!" (tomato soup). It's fair sickening. Some have tried living up, or down, to the "military" in their mode of speech. Instead of gude Gallowgate or worse Ke-elvinside, it shows itself in the Englishy, nippity clippity style of speech beloved of our officers, whose words are few and well-chosen. "Rotten," "ripping," "swank," "blighters," "rations" to rhyme with "nations," and "wash-out"—these are the working words; others are not needed much."

The Reason Why.

"Now, why were these gentlemen put into disguise? They were not consulted: they did not want to wear uniform when they were mobilised (fine word that!): it was not for discipline's sake. No, the reason lies deeper. It belongs to the time when the army was just a handful, and form was of much greater importance than matter; because those in authority had nothing else to do but look after such things. And these same gentlemen need not complain of the vast amount of needless writing and signing of sheets for each patient they take care of, for that is of the same origin. At one time in the War Office there was a man who was piously brought up and believed with Dr. Watts that mischief was found "for idle hands to do." And so he invented these diet sheets, case sheets, diagnosis sheets, passes *et hæc omnia* to prevent the young medicos in our small army from falling into mischief. And it succeeded, no doubt. Now, in the midst of the real thing this clerical work is irritatingly ridiculous. You have to state on which side you operate for appendicitis."

Raids, Chimes and Whistles.

AN official announcement says "The police are advised by the War Office and Admiralty that during the war the use of the chimes and the striking of public clocks should be discontinued between

sunset and sunrise." It is to be presumed that the prohibition has some connection with air raids, and is doubtless a wise precaution. If that is the case, if chimes and public clocks are calculated to give information to the enemy, why not cab-whistles? Chimes and public clocks tinkle their information from various parts of the country, even from remote villages, whereas the cab-whistle is confined to London. An air-raider hearing one of these piercing abominations would at any rate know that he was over a certain part of the metropolis, a piece of precious information which he could never glean from a chime or a clock. To stop a chime during certain hours of the night only, in the case of most clocks, must present a mechanical difficulty, whereas the outrage of cab-whistles could be abolished by a stroke of the pen. Why is it not done?

Those Bells.

From the point of view of the ordinary citizen in peace-time, public clocks and their chimes are not only unobjectionable; to the sleepless they are even companionable. The same cannot, however, be said of church bells. These usually begin their insistent cymballing at an hour when the restless, the wakeful and the feverish are at length on the point of reaching that peaceful, necessary sleep for which they have been longing. But they are not to have it. The charitable Church authorities ordain that for another half-hour these unfortunates are to be stretched on the rack, and at the end of that time the call to sleep has gone. The tolling of the church bell is said to have originated in the belief that the Devil could thus be frightened away from the sacred precincts. It was at a much later date that the bell was used for the purpose of calling the clockless faithful to prayer. In country districts the bell may still serve a useful purpose, but in large towns it is an irritating anachronism which ought to be abolished. A beginning might well be made by preventing any and every newly-erected tin tabernacle from inflicting its peevish cacophony upon an already sufficiently suffering neighbourhood.

"Undesirables."

About the middle of last month a resolution was moved in the House of Commons to exempt from ordinary military service "all fully qualified medical practitioners or registered dentists." Mr. Walter Long resisted the resolution, while paying a high tribute to the work of the profession of whose interests he is a well-known and much-appreciated supporter. The reason of his opposition was that the resolution would enable persons who are "undesirable members of the profession" to escape service of any sort; and he went on to point out that any members of the profession who were roped in to the purely combatant ring could obtain exemption from the Tribunal. This seems to me to be very unsatisfactory. It means that a medical man or a dentist who becomes a combatant would, from this very fact, lie under the suspicion, amounting indeed to a practical certainty, that he had been branded by the Tribunal as an undesirable member of his profession. It is by no means clear how these Tribunals are to be constituted, except that labour and femininity are to be adequately represented. If the law is to stand as outlined above, the members of the profession should see to it that their interests are locally in the hands of sympathetic, educated men who have some knowledge of professional matters. To be officially adjudged "an undesirable" by two labourers, a suffragette, and, perchance, an anti-vivisectionist, would not be amusing.

The Pedestrian Peril.

New Scotland Yard is appealing to the public for information concerning two deaths, both of them believed to have been caused by motor-cars. One is that of a young woman, who was knocked down by a car at New Malden; the other, that of an elderly man found unconscious in St. Mary's Street, Kensington. The first occurred at 10.25 p.m., the other at 9.5 p.m., and they were thus both obviously caused by the combination of darkened streets and rapid driving. The only wonder is that such accidents are not more frequent than they are. It is a positive scandal that 'buses and other heavy vehicles whose impact, even when moving slowly, means almost certain death, should be allowed to career at a break-neck pace along the darkened and slippery streets. People are apt to forget that the force of such an impact is the pace multiplied by the weight, and that these four-wheeled monsters are consequently a deadly peril to anyone who is unfortunate enough to come into contact with them. Restrictions as to the rate of driving which are in accordance with the altered lighting conditions are urgently required. They ought to be enforced at once, and any infringement of them should be very severely punished.

Zeps. and Tubercle.

The old maiden lady from the North who believed in love "in the abstract" finds her counterpart to-day in hundreds whose faith in the open window is of the same cautious quality. The stringent regulations for darkened lights leads to drawn blinds; and drawn blinds, lest they flap, bring the closed window in their train. This is disheartening to those vigorous campaigners against tuberculosis who for some dozen years past have been carrying the icy cross of the open window throughout the length and breadth of the land; for there is no doubt that a great many stay-at-homes will find in the lighting regulations an excuse for a lapse from grace which will continue long after the cause has ceased to be operative. As a set-off against this, there is the undoubted fact that the open-air method which military training entails will engender in many a taste for these methods, which they will insist upon gratifying when, from the trenches, they return to the stuffiness of civilian quarters. In the long run, therefore, the open window stands to win; but in the meantime the fear of the Zep. is the promoter of tubercle.

A friend writes:—

Glasgow University.

"THE Final Year Dinner of the Medical School at Glasgow University is always an interesting function, especially to the graduands. To guests also, particularly if they have arrived at the age and stage of being '*laudatores temporis acti.*' For they are very apt to say to themselves, pensive in their looking backwards, 'This is all very well, but nothing to what it was in Our Year!' This year's meeting, held on the 26th ult., under the chairmanship of the genial Professor of Midwifery, was of interest to all. One new turn, carbon-sketching of hospital events, executed by one of the students, was very clever. But withal there was an unusual staidness, quite unlike the evenings of long ago, for the cloud of the war was over it all. Though there was a seeming brightening up of the crowd by the touches of colour throughout the room introduced by the uniforms of members of both services, yet there was, as was natural, a feeling of repression, an absence of the gaiety that accompanied the function in past years. It would seem that the quiet, self-effacing manner of the students who had been to the front, referred to by Professor Muir, had been reflected on those who were yet to go."

Obesity and Disease.

THE article which we publish this week from the the pen of Dr. Parkes Weber on one aspect of obesity is an important one to every medical man who acts as a referee to an insurance company. The subject of obesity in general, except in so far as the fatness was the result of gross feeding, had been the cause of much puzzlement to observers until its relation to disturbances of the ductless glands came to be thoroughly appreciated. There can be no doubt that, viewed in this connection, over-fatness ceases to be a subject for jocularity and immediately becomes one for prospective and prognostic anxiety. Myxœdema is not obesity; to the seeing eye it is a caricature of obesity. Nor can any careful observer fail to note the differences between the results of too much food and those of the disturbance of the pituitary known as Froelich's Syndrome or, as Jonathan Hutchinson called it, Lipomatosis Universalis Asexualis. Even the question of overfeeding, which, ever since the time of Banting, has been expressed in terms of relative carbohydrate overfeeding, is to-day recognised as a function of the ductless glands; for it is these mysterious organs which regulate the carbohydrate tolerance of the individual. Dr. Parkes Weber's article is full of interest and instruction for those who would have to estimate the bearing of what, for want of a better term, we must still call obesity.

SINAPIS.

Health of Cotton Workers.

THE quarterly report of the Darwen Weavers', Winders' and Warpers' Association throws an interesting light on the mortality figures as they affect this particular industry. During the period named ten members have died, whose united ages total 601 years, the average age being 60 years 36 days. The eldest (a female) tops the list at 83, whist the youngest (also a female) is 37. There are other three women whose respective ages are given as 69, 68, and 66. The oldest male member is 65.

CURRENT TOPICS.

Schools for Physically Defective Children.

IN our present issue we publish a valuable article by Dr. W. A. Winter, dealing with the provision of schools for physically defective children. In the ordinary way the child who is physically defective or invalid will probably not be sent to school. It is suffered to grow up without any mental training or education, and without any chance of earning a living, if, as is likely, its physical defects prevent its undertaking manual work. To such a child there is no prospect but one of continuous dependence. This is all the more deplorable since it frequently happens that a child who is physically defective may be specially bright mentally. Up to the present little attention has been paid to these children, and for the most part they have drifted from the hospital to the workhouse. It is greatly to the credit of the Education Committee of the London County Council that the problem has been tackled, and that some two dozen special schools have been established in London to deal with this class of pupils. These schools have been very successful, and we hope to see the example of London followed in other parts of the Kingdom, though we recognise that the present is not a time when public authorities are likely to embark on new undertakings.

Import of Fruit.

IT is with considerable regret that we note that fruit is among the articles whose importation the Government has decided to limit. Of late years fruit has come to take a more and more prominent part in the diet of the people of these countries. From being regarded as something of a luxury it has become a regular article of diet. This is all for the good, and we would like, in the interests of health, to see fruit used more widely still. We know many people who take it with advantage at every meal, and whose health will certainly suffer if they have to forgo its use. Every physician of experience will agree with our view as to its high value in keeping the teeth and mouth clean, in stimulating the flow of digestive juices, and in promoting a regular action of the bowels. We therefore feel deep regret that the Government has thought it necessary to take a step which is likely to render fruit to a great extent inaccessible for people who cannot afford luxuries. We cannot help thinking that in including fruit in their list of articles whose import is to be limited, the advisers of the Government have had some hazy notion that fruit is merely a luxury. We do not regard it as such, and we cannot help contrasting, as we note the *Spectator* does this week, the attitude of the Government toward apples and oranges and bananas with its decision not to limit the import of sugar and barley and other materials used in the manufacture of alcoholic drinks.

The Compulsory Notification of Measles.

AT a meeting of Bristol Health Committee held on February 1st, Dr. Davies, Medical Officer of Health for the City, presented a special report on

the notification of measles (recently made compulsory) and the increased burden which it will place upon the rates. He stated that the number of notifications received during the first three weeks of the year was 1,054, an average weekly of 351. If that average were maintained to the close of the year it would cost a big sum, probably exceeding £1,000. The preventive value of notification in measles was practically nil, and it had commonly been discarded after a short trial in several districts where it had been adopted. Some benefit might be secured in severe complications, bronchitis or pneumonia, by nursing the patients in hospital, but that could only be secured in exceptional times when the fever incidence in the city was low. As no provision had been made in the city hospitals, at epidemic times the number of beds was insufficient to accommodate the fevers for which they are properly intended. In any case he thought that limited amount of benefit to individual cases might equally well be secured by less cumbersome and expensive methods than compulsory general notification, which imposed an expensive obligation of little preventive value on the city at a time when economy was imperative and was enjoined upon communities. So far as he could gather, the Compulsory Measles Notification Order of January, 1916, followed from the military measles outbreak of the spring of 1915 but it was somewhat belated strategy in regard to that happening. He thought the Health Committee might well advise the City Council to protest against this untimely and vexatious expenditure. He also said they ought to get other towns and counties to join with them in their protest.

The Committee agreed to ask the Council to carry out Dr. Davies's suggestion, the opinion being expressed that the notification meant great expense and little benefit.

The Revolt of Youth.

The manner in which young men of position and assured prospects have thrown all to the four winds, to fling themselves into the war, is of deep significance. It is the expression of the innate desire for vividity, swiftness, and hazard in life, which modern civilisation has half-stifled and thrust into the background of the intellect—but which it has failed to kill outright. Well-nigh choked with the ashes of convention, it nevertheless glows in our boyhood, in minor adventures by flood and field, fanned by the perusal of the penny dreadful; and it leaps into clear flame in the lad who runs away to sea. But in adult life it wanes fast, save when circumstances such as the present bring about a vast intellectual conflagration in an entire nation, to drag the clerk from his stool and put him astride a horse, or the son of a prosperous merchant to drive through the teeth of a flying gale at sea. We are far from denying the clear call of patriotism amongst our young men. But curiosity and a thirst for complete change play a part not appreciated by the superficial observer. It is a matter for congratulation that so much of the primitive child should be alive amongst us all; that so many should prefer a few hours of crowded, and even of terrible life, to an age of dull respectability.

Routine.

Monotony of occupation appears to develop two types of humanity, both of whom are of interest from the professional standpoint. The first, and possibly more common variety, thrives upon repetition. His brain and limbs alike act with a mechanical regularity—the despair and envy of the class next to be considered; and he is conspicuous for fertility and longevity. The second group is composed of those who kick against the traces—and, if possible, over them—in their attempt to escape. They are imaginative and neurotic, frequently of fine intellectual temper, but forced by giant circumstance to pass their lives in a state of fret bordering upon neurasthenia; and even when past middle-age, should an opportunity arise, they take the bit between their teeth. Such, it may well be, are the many of the elderly practitioners now upon war service. The point we aim at is, that this class of sufferers constitute a clinical entity, in whom prevention is of supreme importance, to obviate the development of the psychoses; and that a change, not in the mere superficial sense, but even extending to *professional* occupation, is a therapeutic agent, which in certain cases of merely irregular or abnormal temperament may work wonders.

Antiseptics from the Sea.

In the present great war hospital ships have played a part unparalleled in the past in the transport and treatment of the sick and wounded. The question of the disinfection of these ships is thus rendered increasingly important. Were sanitary measures insufficient, a hospital ship carrying, *e.g.* typhoid patients to England, might be a serious menace. Efforts have been made to devise means of disinfection which should be at once efficient, easily applied, and relatively cheap. According to the *Times*, a large measure of success has been attained by means of an apparatus recently installed in the "Aquitania," under the supervision of Dr. Dakin and at the instance of the Medical Research Committee of the National Insurance Act.

The apparatus consists of an electrolytic cell, a reversing switch capable of carrying 100 amperes, and some ordinary insulated electric cable. The cost is about £50. The cell stands upon a rubber mat to insulate it, and is raised upon a low table to enable its contents to be poured out easily. It is filled with cold sea water, and if a current of 60-75 amperes at 110 volts be then turned on, a solution containing two parts of sodium hypochlorite or available chlorine to 1,000 parts will be obtained in five minutes. The cost of this solution works out at 3d. per 100 gallons.

The solution is also excellent as a sterilizer of drinking water (one part chlorine to one million parts), and as an antiseptic for wounds (used undiluted as produced by the electrolyzer—*i.e.*, two parts hypochlorite of soda to 1,000 parts). Further, in the butcher's department its value was soon evident, and also in the laundry for soaking undyed cotton and linen goods. It was added to the water in the swimming bath of the ship in the proportion of one part in two million parts, with the result that bacteria which had formerly been present in the water to the number of 2,000 per c.c., were reduced to 200 per c.c., a 90 per cent. reduction.

These excellent results have delighted all who have observed them. In the case of the "Aquitania," the economy in largely replacing expensive coal-tar disinfectants, such as carbolic acid, cresol, etc., by electrolytic hypochlorite will approximately

pay for the cost of the cell (£50) in the course of a single trip of three weeks.

The Study of French.

We welcome the remarks of the French Ambassador at the Mansion House on February 5th, on the occasion of the distribution of the prizes award in the thirty-first annual competition of the National Society of French Masters in England. M. Cambon pointed out that the study of French in England and English in France had done much to develop international sympathy. In the Nineteenth Century there was much rivalry between England and France, accompanied by struggles which were sometimes very sanguinary. But before that century closed the two countries came to recognise that in many essential respects their interests were identical, and gradually they came closer together, though now and then there were temporary misunderstandings. If anything remained to strengthen the bonds of sympathy between the two nations, it was the present war, in which English and French soldiers were fighing side by side for the noblest of causes—the defence of European right and liberty. The entire world admired the self-abnegation and tenacity of those who were fighting for that cause. His Excellency declared that from this war would spring an Anglo-French understanding so solid as to be indestructible and making for humanity, progress, and liberty throughout the world.

The Lord Mayor expressed the belief that the intimacy and affection of the French and the British peoples would soon be so infinitely increased by their having fought together, shoulder to shoulder, in this war, that a knowledge of each other's language must in future be a definite and compulsory part of the curriculum of every college and school in both countries, and must be treated as indispenable in every vocation of life. French must in the years to come not only be the language of diplomacy but, in unison with our own, the language of trade, commerce, and everyday life. He was afraid that the English were not, as a nation, good linguists, but when he looked at the long list of prizes and certificates won by young pupils of schools in this country he felt encouraged to think that, with time, perseverance, and patience, the English might, after all, acquire a better reputation as linguists than they had enjoyed in the past.

The Medical Press and Circular has for many years presented to its readers, in English dress, articles by leading members of the profession in France. We wonder if the coming generation of English medical men will be able to read such, with pleasure and profit, in the beautiful language of our gallant allies.

A Surcharge for Over-Prescribing.

A report from the Panel Committee of Aberdeen Insurance Committee concludes, viz.:—"The Panel Committee were of opinion there had been excessive ordering of drugs in the case above mentioned (a doctor on the Aberdeen panel), and they now call upon the Insurance Committee to deal with the matter in terms of sub-section (2) of section 40 of the Insurance Regulations." The result was that the doctor was surcharged £6 5s., being approximately the amount of difference between the cost of prescriptions written during the quarter ending December 31st, 1914, and the amount available in the drug fund on the basis of a fair average as between all the doctors on the panel." This was carried by five votes to four.

Neil Kenyon tells a story in "Doric" of "goin' into a restaurant, whaur he saw twa chaps at a table. Yin was an Aiberdeen man, and the ither had nae money either," and so on. He must have been wrong as to the town. It is evident that Aberdeen, as represented by their Panel Committee, are looking keenly after the cash. Reducing medical effort and work to a fair average: their views on herring-gutting we have no doubt are aseptic and above reproach, but on the treatment of patients ———. Five to four: "Five of them were foolish."

Medical Research and the Carnegie Trust.

The fourteenth annual report of the Carnegie Trust has just been issued. Even this department of original research in our academic life has been affected by this ghastly war: Six Fellows and nine Scholars are at the front. Some of their places are kept open for their return, which we hope will be soon. This part of the outlay was £7,000 for the year. One hopes that the return, therefore, is commensurate.

At St. Andrews, fourteen beneficiaries, with the help of untrained volunteers, are engaged in the preparation of dulcitol and other chemicals required for medical purposes. This is all right: considering the number of preparations put out for medical use by our enemy, one would say it would be a wise thing now for us to learn this business for ourselves. The report needs more than a casual looking over to size it up. We shall refer to this report later on.

Cutting Down Panel Doctors' Remuneration.

We notice that the Carnarvonshire Insurance Committee, in regard to payment of the doctors for quarter ended December 31st, 1915, have recommended payment on 72 per cent. of the members on the doctors' panels. They have not yet managed to remove from the panels the names of those enlisted, but by some differential calculus they make out 72 per cent. as being a fair basis of payment. The 28 per cent., consisting of picked, healthy men, are taken off the doctor's lists, leaving him all the weak and unhealthy. These 28 per cent. would have given the doctor no work to speak of, but they still have the weaklings. They have just, then, as much work, and not quite three-fourths of the remuneration. It may be fairly asked: Was the spirit of the Act not to make the healthy patients help pay for attendance on their sick brothers and sisters? That, we take it, is the meaning of the flat rate. Had the authorities plainly said that in this serious time they could not afford the full payment, would it not have been wiser to say so: and the profession would gladly have met them by agreeing on patriotic grounds to do with less. We had better watch lest this is the proverbial thin end of the wedge.

PERSONAL.

Colonel A. D. Sharp, F.R.C.S., R.A.M.C., C.M.G., of Leeds, has been appointed Assistant Director of Medical Services to the 49th West Riding Division in France.

Sir Hugh Owen, G.C.B., whose death is announced, took a great interest in questions of public health and poor-law administration. He was an Honorary Fellow of the Royal Institute of Public Health.

Dr. Willoughby Mason Willoughby, Deputy Medical Officer of the Port of London, and Senior Boarding Medical Officer at Gravesend, has been appointed Medical Officer of Health for the Port, in succession to the late Dr. Herbert Williams, at a commencing salary of £800 per annum.

ORIGINAL PAPERS.

DISEASES IN THEIR RELATION TO OBESITY: SOME POINTS TO BE CONSIDERED IN REGARD TO ASSURANCE EXAMINATIONS.*

By F. PARKES WEBER, M.D., F.R.C.P., London.

Under the following headings only the more ordinary questions are referred to.

1.—Diseases of the Circulatory and Hæmopoietic Systems.

It is well known that many obese persons have slight œdema about the ankles when they are up and have not been recently lying down. In most cases this slight œdema is, I believe, not a sign of particularly bad prognostic significance. Occasionally, however, it rapidly increases and becomes associated with shortness of breath on exertion out of proportion to the obesity. It then may constitute an early sign of cardiac failure. Especially is this to be feared in persons who have been formerly addicted to excess of beer (having "beer-hearts") and alcoholic drinks, even when by auscultation of the heart no murmur of valvular disease can be discovered. In such cases signs of so-called "myocarditis" may suddenly arise, accompanied by the characteristic "irregular irregularity" of auricular fibrillation.

In other cases the slight œdema in question may be partly due to varicose veins, and it is only the varicose veins that have to be considered in regard to the assurance.

Occasionally a plethoric type of obesity may to some extent mask the presence of arterio-sclerosis and commencing aneurysm of the aorta. Symptoms such as shortness of breath and thoracic discomfort may at first be wrongly attributed to the obesity, but more exact examination (including the brachial systolic blood-pressure, the estimation of the daily quantity of the urine, the Wassermann reaction and the Röntgen-ray examination of the thorax) will probably quickly reveal the complicating disease.

In very rare cases in pasty obese individuals, pallor and slight œdema may be due to a hæmopoietic disease—namely, pernicious anæmia or an atypical leukæmia.

2.—Diseases of the Lungs.

Emphysema of the lungs with progressive dilatation of the right side of the heart and other results may be at first masked by obesity. Of great importance is the auscultation of the infra-scapular regions for the more or less permanent crepitation which shows the presence of (what is generally known as) chronic catarrh or chronic œdema of the base of one or both lungs. In this connection one might, I believe, add that recurrent attacks of bronchitis associated with asthma-like breathing are more frequently observed in plethoric fat persons (who have mostly been great eaters) than in others. Pulmonary tuberculosis is, of course, generally associated with under-weight rather than over-weight, but there are exceptions, and old quiescent or obsolete pulmonary tuberculosis may—partly as a result of methods of treatment—occasionally be associated with a plethoric type of corpulence.

* Paper read at the Assurance Medical Society, London, January 5th, 1916.

3.—Diseases of the Liver, Pancreas, and Kidneys.

It is a well-known truism to say that the detection of cholelithiasis or nephrolithiasis may be in various ways rendered more difficult by the presence of obesity. Cholelithiasis is acknowledged to be relatively frequent amongst fat persons, rather more so in women than in men. Obesity may sometimes draw the examiner's attention away, and so, in a sense, "mask" the presence of chronic nephritis (especially contracted granular kidneys), notably so if the urine only intermittently contains albumin, and even then in mere traces. Examination of the centrifuge sediment of the urine for tube-casts may be of some use, but it must be remembered that one or two hyaline or even granular casts may occasionally be found in the urine of practically healthy persons by the help of the centrifugal machine. Estimation of the brachial systolic blood-pressure may likewise help in the diagnosis. Occasionally an ophthalmoscopic examination in such cases may reveal the presence of unsuspected retinal changes (so-called early albuminuric retinitis). In regard to the pancreas, one may remember that the subjects of acute hæmorrhagic pancreatitis are not rarely corpulent individuals, or individuals who have been addicted to alcohol.

4.—Metabolic Diseases.

The not uncommon associations of obesity with gout, uric acid gravel, and diabetes mellitus are so well recognised that I need not here enter into any detailed discussion on the subject. Such associations cannot seem surprising, if we remember that obesity itself, whether inherited or acquired, is to some extent a metabolic disease or a metabolic abnormality.

Moreover, over-eating and sedentary habits are certainly not rarely factors in the causation of gout and diabetes mellitus, as they are in the causation of obesity. It is especially the mild form of diabetes mellitus occurring in "middle-aged" and elderly persons (more so in those of Hebrew descent than in others) that is associated with obesity. A "lipogenic" form of diabetes mellitus has even beeen spoken of.

5.—Diseases of the Ductless Glands and Internal Secretions.

I shall merely mention the chief syndromes associated with excess of fat:—

(*a*) Dercum's disease, or adiposis dolorosa, a disease which occurs almost, if not quite, exclusively in females of middle age, appears to be due to a disturbance of the internal secretions; it is sometimes connected with disordered action of the thyroid gland.

(*b*) Diffuse symmetrical lipomatosis of the neck and other regions. This condition is met with almost exclusively in males of middle age, when probably sexual activity is beginning to decline. It is, however, by no means always associated with diminished functional vigour of the sexual organs. It practically only occurs in those who

have habitually indulged in malt liquor or other alcoholic drinks.

Sir Jonathan Hutchinson pointed out that in this condition it was especially the fat about the roots of the hair follicles of certain regions that tended to hypertrophy; for instance, that about the roots of the large pubic hairs in man. He compared it to "nuchal lipoma," developing about the mane in asses. Diffuse lipomatosis of the neck has been known in Germany as Madelung's "Fetthals," because Professor O. W. Madelung wrote about it in "Langenbeck's Archiv." in 1888. In France a theory was started that the characteristic forms of symmetrical lipomatosis were due to a kind of semi-inflammatory development of fat, spreading from the various regional groups of the (in some way diseased) superficial lymphatic glands. Hence the term "adeno-lipomatosis" was applied to the condition. (*a*) (Compare the paper by Launois and Bensaude, "L'Adéno-lipomatose symétrique à prédominance cervicale," in *Presse Médicale*, Paris, for June 1st, 1898, p. 296.) In England an excellent account of symmetrical lipomatosis was published by Morrant Baker and Bowlby in the "Medico-Chirurgical Transactions" in 1886 (London, vol. 69, p. 41), but I believe the condition had been already described by Sir Benjamin Brodie. In these cases hepatic cirrhosis and ascites sometimes supervene.

(*c*) Fröhlich's pituitary "syndrome of adiposity with insufficiency of the sexual organs" ("dystrophia adiposo-genitalis," or "dystrophia genito-adiposa") is thought to be connected with hypopituitarism, that is to say, with deficient functioning of the anterior (glandular) portion of the hypophysis cerebri.

Various atypical cases of adiposity, supposed to be connected with pituitary disease, have been described, some of them as examples of a "pluriglandular syndrome."

(*d*) Most cases of "eunuchoid" obesity in men whose sexual organs were never well developed, or have undergone atrophic changes, are probably allied to the preceding group.

But internal secretions from the testes and prostate seem to have some influence antagonistic to the accumulation of fat, and adiposity in males may doubtless be favoured by castration or by diseases of the testes and prostate gland. In women the menopause is apparently often followed by a tendency to obesity, and so is a premature menopause resulting from oophorectomy and operations on the pelvic organs or from ovarian disease. It must not be forgotten, however, that disorders of the pelvic viscera in females frequently lead to a sedentary mode of life, and thus indirectly favour the development of obesity. Moreover, one of the reasons why obesity is altogether more common in women than in men is probably the greater frequency of sedentary habits in women.

(*e*) A condition which may be legitimately described as "precocious obesity" has been occasionally observed in children in association with new growths of the type of malignant "hypernephroma." The children in question exhibit a coarse florid plethoric obesity, giving rise to broad crimson or purple-coloured "striæ atrophicæ" of the skin of the buttocks, thighs, etc. They look much too old for their real age, and tend to precocious development of the sexual organs; a little girl thus affected might look like a coarse farm woman, 30 to 40 years of age, who had been much exposed to the weather and had been very liberally fed. This precocious obesity occurs more in girls than in boys; in boys the hypernephromatous disease sometimes gives rise to muscular excess without obesity, the exaggerated development of the skeletal muscles giving the boy the appearance of an "infant Hercules" (in antique Greek and Roman art).

(*f*) A condition of "lymphatism" associated with excess of subcutaneous fat may perhaps likewise be mentioned under this heading.

Seeing how much the prognosis in obesity (often even when associated with other diseases and morbid conditions) is modified by rational treatment and the fat person's intelligent control over himself, I may be permitted to add a few words of old oft-repeated advice. Half the cases of ordinary obesity might have been kept within bounds, or entirely got rid of, by a timely recognition of two old mottoes: "Principiis obsta" (*Ovid.* "Remedia Amoris," 91); and "Immodicis brevis est ætas et rara senectus" (Martial, *Sat.* VI., 29, 7)—in other words, by early practising strict moderation in eating, etc. The excess of the intake (fuel) over the output (work, etc.), may lead first to obesity and then, by a process of choking of the human furnace and chimneys and clogging of the machinery as a result of imperfect combustion, to metabolic diseases, etc. W. Ebstein has divided ordinary cases of obesity into three stages, namely, the enviable stage, the comic stage, and the pitiable stage. It is in the third stage—the pitiable or "helpless" stage—that the wretched person loses bodily strength and activity, cannot take exercise, and has often no longer the will-power to resist his complaint. It is in the first state, that is, the stage of plumpness or *embonpoint*, the stage admired by many, that strict moderation in eating, etc., ought to become a habit of life. Several years ago Sir William Osler drew attention to the advantages occasionally derived from a trace of albumin being discovered (at life assurance examinations, etc.) in the urine of men over fifty years of age, (*a*) and quite recently he (*b*) has alluded again to an instance in which a distinguished man, when 60 years of age, was found to have a trace of albumin and a few tube casts in the urine. Sir Andrew Clark, who was inclined to take a grave view of the renal condition, gave good advice, and the patient, who was himself a medical man, ever afterwards lived a careful life, and reached the patriarchal age of 94. I am sure that if the relatively early stages of obesity were more generally regarded in a serious light by life assurance companies, or rather, by their medical advisers, and if slight extra ratings were more generally insisted on and if that became universally known to the lay public, many more "candidates" for the higher grades of obesity would be inclined to alter their manner of living in time to avoid arriving at the helpless stage. Of course, it is not directly from their obesity that most fat persons die but from the complications of obesity or the diseases associated with it. The treatment of these conditions is naturally beyond the scope of the present discussion.

In regard to the relative frequency with which different diseases are found associated with obesity, it is, I think, worth while appending the following statistical data, beginning with the most recent. But I have hardly made use of them in formulating the first part of my paper.

(*a*) I believe that this term owes its origin to an error or to a chance association, and that in most cases the lymphatic glands of the neighbourhood are not in the least diseased.—F. P. W.

(*a*) Osler, "On the Advantages of a Trace of Albumin and a Few Tube Casts in the Urine of Certain Men over Fifty Years of Age," *New York Medical Journal*, November 23rd, 1901, Vol. 74, p. 949.

(*b*) Obituary Notice on Sir Charles Tupper, *Lancet*, 1915, Vol. ii., p. 1050.

TABLE I.—From I. Romanelli's paper on Obesity and Life Assurance in *Il Policlinico* (Sezione pratica), Rome, August 8th, 1915, Anno XXII., p. 1061.

During the years 1913 and 1914 an Italian Assurance company (Istituto Nazionale delle Assicurazioni) rejected 308 obese candidates. In 36.38 per cent. the obesity was apparently present without complications; in 21.75 per cent. it was associated with glycosuria; in 10.38 per cent. it was associated with nephritis; in 7.18 per cent. it was associated with albuminuria; in 5.84 per cent. it was associated with heart trouble; in 5.19 per cent. it was associated with arteriosclerosis; in the remaining cases there were various complications, such as syphilis, alcoholism, bronchial catarrh, etc.

FROM TABLE SHOWING THE CAUSES OF DEATH IN 1,114 ASSURED LIVES.

Cause of Death.	Underweight (percentage of the total number of underweight deaths).	Normal weight (percentage of the total number of normal weight deaths).	Overweight (percentage of the total number of overweight deaths).	Total (percentage of the total number of deaths).
Pulmonary tuberculosis	21.3 (22.3)	12.5 (75.0)	0.9 (2.7)	10.0
Acute pneumonia	3.4 (5.2)	8.2 (71.4)	5.5 (23.4)	6.9
Cancer	6.9 (11.3)	5.5 (52.1)	7.7 (36.6)	6.3
Cerebral Apoplexy	3.4 (6.3)	3.0 (31.2)	12.3 (62.5)	5.8
Bright's disease and nephritis ..	2.6 (6.0)	3.1 (42.0)	8.0 (52.0)	4.5
Hepatic cirrhosis and alcoholism ..	0.9 (2.3)	2.7 (40.9)	7.7 (56.8)	3.9
Cardiac disease of uncertain nature	1.7 (4.8)	3.0 (47.6)	6.1 (47.6)	3.8
Typhoid fever ..	2.6 (8.3)	3.6 (66.7)	2.8 (25.0)	3.2
Influenza	1.7 (5.5)	3.7 (69.5)	2.8 (25.0)	3.2
Tuberculosis, other than pulmonary	5.1 (24.0)	2.7 (72.0)	0.3 (4.0)	2.3
Diabetes mellitus ..	0 (0)	1.8 (52.2)	3.4 (17.8)	2.1
Angina pectoris ..	0 (0)	1.0 (58.3)	1.5 (41.7)	1.1
Cardiac syncope ..	1.7 (16.7)	0.6 (33.3)	1.8 (50.0)	1.1
Fatty heart ..	1.7 (18.2)	0.7 (45.4)	1.2 (36.4)	1.0

NOTE.—The numbers in brackets denote respectively the underweight, normal weight and overweight percentages of the total number of deaths from the given cause.

TABLE II.—From S. W. Carruthers (London), "Das Kartenregistrier-System im Gebrauche der versicherungs-medizinischen Statistik," "Zeitschrift für die gesamte Versicherungs-Wissenschaft," Berlin, 1907, Vol. vii., pp. 393-412. The tables given by Carruthers were obtained from the experience of the London Office of the Mutual of New York Life Assurance Company, up to the year 1906. The "overweights" are those 15 per cent. or more above the Company's standard, the "underweights" are those 10 per cent. or more below the standard, and the "normal weights" are those between 10 per cent. below and 15 per cent. above the standard.

TABLE III. From S. W. Carruthers, *op. cit.*
CAUSES OF 1,114 DEATHS, ARRANGED ACCORDING TO AGE AND OVERWEIGHT.
(The Numbers are Percentages.)

Cause of Death.	Up to 30 years of age	From 30 to 40 years.	From 40 to 50 years.	Over 50 years.	Total.
Tuberculosis (137) ..	23.3	40.1	26.3	10.3	100.0
Overweight ..	0.7	0	2.2	0	2.9
Cardiac diseases (107)	2.8	14.7	33.7	48.6	100.0
Overweight ..	0.9	3.7	13.2	20.5	38.3
Acute pneumonia(77)	10.4	26.0	38.9	24.7	100.0
Overweight ..	0	3.9	10.4	9.1	23.4
Cancer (70) ..	0	4.3	34.4	61.3	100.0
Overweight ..	0	0	10.0	24.4	34.4
Cerebral Apoplexy(64)	3.2	7.8	37.5	51.5	100.0
Overweight ..	1.6	3.1	25.0	32.8	62.5
Bright's disease and Nephritis (50) ..	2.0	20.0	38.0	40.0	100.0
Overweight ..	0	6.0	22.0	24.0	52.0
Hepatic cirrhosis and alcoholism (44) ..	2.2	25.1	36.3	36.4	100.0
Overweight ..	0	6.8	20.5	29.6	56.8
Diabetes Mellitus (32)	13.0	26.2	26.0	34.8	100.9
Overweight ..	0	0	13.0	34.8	47.0

PHYSICALLY DEFECTIVE CHILDREN AND THE PROBLEM OF THEIR EDUCATION.*

BY W. A. WINTER, M.D.,

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WHEN deciding to address you on the problem of the education of the physically defective child I was fully aware of the fact that the present is not the most suitable time to expect public bodies or the philanthropic public to embark on schemes entailing increased expenditure, but I also knew that in order to induce people to take up a question of this sort it is first of all necessary to educate public opinion, for it is usually the general public who start these questions while Government departments absorb them at a much later date.

To convince you that it is necessary to educate Irish public opinion in this matter I need only mention that, as far as I have been able to ascertain, there is no day school for physically defective children in Ireland, though the Orthopædic Hospital and the South Dublin Union Infirmary have schools for their inmates: the former is recognised by the National Board of Education, but the school in the South Dublin Union is under the sole control of that Union. In addition to these schools, I understand that some instruction is given by voluntary teachers at the Children's Hospital in Harcourt Street, Dublin, and I have also reason to believe that in Belfast the subject is under consideration for tuberculous children.

I do not propose in the limits of this address to deal with the cases of the mentally defective or the blind children; they are to a great extent already looked after by public bodies or private philanthropy, nor do I propose to address you on subjects or methods of instruction.

It must have come under the personal observation of most of you that the child who suffers from physical disability is not necessarily also endowed with a dull brain; indeed, I think the reverse is not

* A Presidential Address delivered before the Section of State Medicine in the Royal Academy of Medicine in Ireland, on Friday, January 7th, 1916.

infrequently the case, as we sometimes find that the delicate child is often mentally and in technical matters more than usually receptive of instruction. One has but to recall the wonderful work that has been done by tuberculous people in order to admit to ourselves that, in spite of their ailing bodies, their minds have been able to acquire knowledge, while their imagination and skill with their hands clearly demonstrate to us that in this class, at least, of physical defectives the mind is not infrequently hyperacute.

Left without education, the outlook for delicate children is very dark, for it is probable that, being unable to earn their livelihood, they will ultimately drift into the wards of the workhouse or will go to swell the numbers of the unemployable or criminal classes; in either case they become a charge on the community, and it is because I think that this class—more particularly the cripple—needs education more than most children that I bring their case before you this evening, for they are debarred by their infirmity from competing on even terms with their more healthy fellows, and are compelled to offer superior knowledge or extra technical skill in order to compete on level terms with them, and if they are not thus endowed they can only hope to be employable in a limited field, where in some sedentary occupation they may obtain a living wage by possessing a good general intelligence or some skill with their hands.

Dr. Rayner has defined the physically defective child as one "who suffers from some defect or disease, other than a mental one, which seriously interferes with ordinary school life and which is likely to operate against the efficiency of the child viewed as a prospective citizen." This is a wide definition, and I think it takes in all the cases that it is necessary for us to consider. In Ireland, owing to the fact that we have no medical inspection of school children, we have not any means of ascertaining what is the number of these children. Had we that inspection we would not only know the number, but would, perhaps, be in a position to estimate the relative numbers of these children in the towns and in the country, and also what influence was played by heredity and what by environment. The former is, I think, comparatively unimportant, and may, in many cases, be remedied by due care and precaution in the latter by attending to the food and lodging, and the education and physical development of the child.

From the medical standpoint it is, I think, a hopeful sign that professional educationalists are now showing a tendency to think less of subjects and more of the individual child, with more regard to its bodily welfare, its individual capacity, and its natural tendencies. The practical outcome of this is seen in the number of special schools that have come into existence in England in the last fifteen or twenty years: in the year 1911 there were 34 of these special day schools in England, 24 of which were in the county of London, while there were also three residential schools; this number has now been increased. I regret that I am unable to give you the present figures, but a side-light is thrown on the question by the fact that the Education Committee of the London County Council publish a book of regulations for special schools, which contains 190 pages.

I may, perhaps, be allowed again to refer to the question of environment and its relation to the health of children, for there can be no doubt that much chronic invalidism in children is directly traceable to this cause. Dr. Arkle of Liverpool carried out an investigation of 2,000 children attending various schools in that city. He divided the cases into four classes, and his tables go to prove that the better the social status of the families, the better was the average height and weight of the children; and he also gave a table which showed that, as a rule, the general nutrition of the children was proportionate to the wages earned by the parents.

	Year of Age							
	7	8	9	10	11	12	13	14
Average Height—	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.
Secondary Schools	3 11½	4 2½	4 4	4 6½	4 7½	4 10	5 0½	5 1¾
Council Schools A	3 9½	3 11¾	4 1¾	4 3½	4 5	4 7	4 9	4 10½
Do. B	3 8¾	3 10	4 0	4 1¾	4 3¾	4 5½	4 6	4 8½
Do. C	3 8	3 8½	3 11	4 0½	4 0¾	4 3½	4 5½	4 7½
Average Weight—	st. lbs.	st. lbs.	st. lbs.	st. lbs.	st. lbs.	st. lbs.	st. lbs.	st. lbs.
Secondary Schools	3 7¼	4 0¾	4 3½	4 10	5 0¼	5 7	6 4¼	6 10½
Council Schools A	3 2	3 4½	3 11½	3 13	4 5½	4 10½	5 3½	5 5¾
Do. B	3 1	3 3½	3 8¾	3 11	4 3	4 8	4 12¾	5 5¾
Do. C	3 1	3 1¾	3 6½	—	3 13½	4 6	4 13¼	5 1¼

A = Best class of Public Elementary Schools

B = Represents class when the parents are mostly labouring classes or small shopkeepers

C = Children of the poorest classes, the parents being of the casual labourer class

	Boys			Girls		
	A	B	C	A	B	C
Number	298	442	286	325	383	213
Percentage—						
Good nutrition	80	28.5	10.5	91.6	65.7	16.9
Fair ,,	17.8	60.1	35.3	8.1	33.9	52.5
Poor ,,	1.3	9.7	48.6	—	.7	28.6
Bad ,,	—	.7	2.4	—	—	1.8

A, B and C in above table refer to the same classes as in the previous table.

The above tables are full of interest, and you will be especially interested, I think, in class C, showing as they do a lower average height and weight, and also a poorer state of general nutrition; and, I think, it is reasonable to assume that the children of this class will furnish more than their correct proportion of invalid children; some, indeed, will only need to attend schools because the general conditions of home life are so bad; but this class is also, I think, likely to supply more of the cases of rickets and tuberculosis in its various forms than classes A and B.

We can get some idea of the number of cases likely to need special schools, by consulting figures that have been published in England and Scotland, where it has been estimated that about 5 per cent. of the children are suffering from defective hearing, sufficient to draw the teachers' attention to it, while an investigation of the hearts of 600 school children in Edinburgh showed that 15 of them suffered from valvular disease, and when you add the cases of tuberculosis and rickets the number of invalid children will be very greatly swelled. What I have said will, I think, suffice to prove to you that there are many children who cannot attend an ordinary school, or, if they do so, they cannot attend regularly, or with a fair prospect of deriving average benefit from such attendance.

We can, perhaps, make a rough estimate of the number of delicate children likely to be found in Dublin by consulting the figures published by the Education Committee of the London County Council for the year 1913-14, which states that the total cost of special schools in the county of London for that year was £70,694, at an average cost of £23 per child, which would make it appear that the number of children attending special day schools in London was about 3,070, and assuming the proportion of these children to the total population is the same in London and in Dublin, it would appear that there are about 200 children suitable for attendance at special schools in this city.

How does London deal with these children? I mentioned earlier in my address that in 1911 there were 24 special day schools under the County Council. These schools are scattered all over London, and are grouped in such a way that it is designed that no child shall be compelled to travel more than two miles in order to attend school; children who can travel by 'bus or train are supplied with tickets, which are available during the school term, and any children who are unable to travel in public conveyances are collected by special 'bus or ambulance. Each of these vehicles is in charge of a nurse or attendant, who is responsible for the collection of the children from their homes or a stated centre, and for their delivery to their parents at the conclusion of the school day; in addition to this special guides may be employed. Ambulances have accommodation for two stretcher cases, and for 10 or 20 children, according as the vehicle is a one or two-horse one. The nurse is in attendance at the school all day, and is, as a rule, I believe, consulted by the head mistress as to whether an apparently ailing child is fit to have instruction on any particular day, and even if the child is unfit to benefit by instruction its presence at school counts as an attendance for the purpose of grants. Technical instruction is given in all special day schools in London. No mentally defective child is admitted to these schools for physically defective children.

Mid-day meals are served at all special schools, and such meals are free in all cases that are deemed to be necessitous. It is one of the duties of the nurse to superintend the preparation of this meal, and to be present while the children are eating it; the nurse is further of great use in keeping the school medical officer in touch with the parents of the pupils, and their home surroundings are noted, and, if possible, improved. While at school suitable couches, etc., are supplied for all cases that need them, and the medical officer is, of course, responsible for saying how much instruction, if any, a particular child is to receive, and it is his duty to attend at the school at least once every week, and oftener if required.

Owing to the necessarily somewhat irregular attendance of the children at these special schools, the regulations of the School Board permit of a somewhat larger number of pupils being on the school roll than is allowed for similar accommodation at an ordinary day school, the figure in all special schools being 10 per cent. in excess of the apparent accommodation of the buildings.

In Ireland, as I have stated before, we have no special day schools, but it is probable that the Commissioners of National Education would frame rules to suit such schools, and one of their fundamental rules states that in order that a school should be recognised for the purpose of grants, it must have an average attendance of at least 20 pupils between the ages of 3 and 16 years; but rule 179 would seem to show that they have a discretionary power, for it says:—"In certain cases—namely, where means of religious instruction are not obtainable by children of a particular denomination within reasonable distance of their homes—the Commissioners are prepared to make modified grants to schools in which the average attendance is less than 20." It would thus appear that the Commissioners have discretionary powers to recognise small schools on the grounds of religious instruction, and they would, I think, probably be prepared to recognise small schools especially designed to promote the education of the physically unfit.

From a letter which I received from the Commissioners of National Education in Ireland last November, it would appear that their attitude is favourable to the question of special schools, for, in their letter they state that they had given favourable consideration to preliminary enquiries with reference to the proposal to start an open-air school in Dublin and also in Belfast. The former scheme has not been proceeded with, but the latter is still under consideration, and they further point out with reference to the school at the Orthopædic Hospital that each child receives instruction for only one hour daily, instead of four hours as in an ordinary national school, and that the subjects taught are modified to suit the case of these special pupils. Yet, I understand that the grant given to this school is sufficient to cover all expenses, and that it is carried on without being in any way a drain on the funds of the charity. There are usually about 50 pupils on the roll of this school.

I have previously referred to the fact that in 1911 there were three residential schools in England for physically defective children, and I have read with great interest an account published by Dr. Telford, giving details of the work and management of the school at Swinton House, Manchester, which was started in 1905 by the Education Committee of that city, and had at that time accommodation for 60 children. This number of beds was found to be quite inadequate, as, at the time Dr. Telford wrote his paper in 1910, there were 120 suitable cases on the waiting list of this school hospital. The Education Committee had, however, by this time become so thoroughly satisfied that the scheme had justified its existence, that they had taken the lease of an adjoining house and grounds, and were preparing it to receive another

60 children, so that Manchester now possesses a residential school capable of accommodating 120 invalid children.

In a general way it may be stated that experience has proved that the majority of the cases suitable for admission to this class of residential school are cripples, and Dr. Telford divides them into two classes—(*a*) stationary: (*b*) progressive. In the former class he puts the children who are suffering from a disability, the cause of which has ceased to be active. Under this heading come cases of rickets, injuries at childbirth, congenital malformations, and infantile paralysis; while the progressive class is almost entirely made up of cases of surgical tuberculosis, and inasmuch as the object of these schools is twofold—in the first place to educate the child, and in the second to endeavour to cure or remedy the effects of the disease or disability—you will, I think, agree that it is necessary that the greatest care should be taken in the selection of cases for admission, and how useless it would be to admit children when there is little or no hope of being able to cure the disease or remedy defects already present; and in practice it has been found that the rule which is enforced in most sanatoria for pulmonary tuberculosis, only to admit early cases, applies with equal force to the cases of surgical tuberculosis admitted to these schools, because failure to observe this fundamental rule will lead to disappointment, and the natural question will follow: Is the expenditure justified?

When selecting cases for admission it must always be borne in mind that these children are being admitted to a school, and the first necessity in a candidate for admission is that the mental and bodily condition of the child should be such as will enable it to receive regular instruction, and a vast majority of such suitable cases are usually recruited from these classes:—

1.—Rickets.
2.—Infantile paralysis.
3.—Early tuberculosis.

The above cases usually do well, but with reference to the third of these classes it has been found by experience that cases which have gone on to the formation of abscess usually prove unsuitable.

With regard to the general management of the school, it is run somewhat on hospital lines. Great care is taken as to the diet of the children, and it is also considered to be of the utmost importance that as much of the day as possible is spent in the open air, and when weather conditions are at all favourable all instruction is given out of doors. There is an ample playground attached to the school, and it has been found to be greatly to the advantage of the school that it possesses large gardens which are not only able to supply fruit and vegetables to the school, but are also a source of profit, and are further of use for the training and amusement of the pupils. The school also possesses its own dairy, which keeps the children supplied with plenty of good milk, and is also a source of profit to the institution.

No operations are performed in the school, as it has been deemed to be more economical and better for the children that they should be removed to hospital when active surgery is required.

There still remain two important matters for our consideration—the results of the school and its cost.

During the first five years of its existence, 98 cases were discharged from the school. Of this number 37 went to an ordinary day school, and 12 to work, while 19 were removed by their parents.

The 98 cases were made up as follows:—

Tuberculous disease of spine	39
,, ,, hip	21
,, ,, knee	8
,, ,, ankle	1
Rickets	18
Paralysis	8
Congenital dislocation of the hip ...	1
Amputation of leg for injury	1
Ununited fracture of leg	1
	98

These cases were discharged as indicated below:—

1.—Discharged to an ordinary day school ...	37
2.— ,, to work	12
3.— ,, as unfit for education	24
4.— ,, on reaching the age limit ...	3
5.—Died	3
6.—Removed by parents	19
	98

The cases discharged to an ordinary day school were:—

Tuberculous disease of spine	8
,, ,, hip	9
,, ,, knee	1
Rickets	14
Paralysis	3
Amputation of leg for injury	1
Ununited fracture of leg	1
	37

While the cases discharged to work were:—

1.—Tuberculous disease of spine ...	3
2.— ,, ,, hip ...	4
3.— ,, ,, knee ...	2
4.—Rickets	2
5.—Paralysis	1
	12

Of the 24 cases discharged as unfit for education, 21 were cases of tuberculosis, and 3 were mentally unfit.

With regard to the cost of education, etc., at Swinton House, it would appear that the average cost is about £30 per head per annum. From the first it was established as a principle that all parents who were in any way able to do so were expected to contribute towards the cost of the maintenance of their child; other sources of income were contributions from outside authorities, Government grants, sale of cattle, plants and farm produce; receipts from all these sources amounted to about two-fifths of the total cost of the school, leaving the remaining three-fifths to be made up out of the rates, or, in other words, the cost to the local ratepayers was about £30 per head per child. It may here be pointed out that while Parliament has sanctioned the erection and maintenance of these residential schools, it had so far—1910—given them no special consideration in the matter of grants; this ought not to be, and I think you will agree with me that considering the amount of work done for the State by this school in the year 1909-10, the grant of £4 per head was, to say the least of it, inadequate.

You will naturally ask—Is the expenditure of £30 per head for each pupil a charge on the local rates that is justified by results? In this connection I must, first of all, remind you that Swinton House is not only a school, but also a hospital, and in this dual capacity the expenditure is not, I think, excessive, especially when we consider the results; for you will remember that during the first five years of its existence 98 cases were discharged, and of these 50 per cent. were either discharged to an

ordinary school or to work, while 19 were removed by their parents, and some of these cases were so improved that Dr. Telford says he has no doubt that they eventually got quite well. Still, I think that, even omitting these doubtful cases, the experiment of the Manchester Education Committee has been justified by its results, and that they are justified in increasing their accommodation.

How far later legislation has made further Government grants available for these schools I am not quite certain, for, under the medical grant regulations the Board of Education may now give a sum of £8 a year, which is paid direct to the school, and further, there is the "Hobhouse grant" of half the amount paid by the local authority sending the child to the school. If these grants—which I think are only available for tuberculous cases—are available for schools like Swinton House, it would materially reduce their cost to the local ratepayers, as for the year under consideration the number of cases that could be classed as tuberculous was 39, and the increased grants would considerably reduce the cost of keeping up the school from the point of view of a local authority.

The question of the grant-in-aid for the education and treatment of tuberculous children naturally makes us inquire what is being done for children suffering from pulmonary tuberculosis. In England there appears to be a growing tendency to provide special accommodation for them, but in Scotland and Ireland it does not, as far as I am aware, exist, though I think it is probable that some effort will be made to make such provision, because the experience of sanatoria all over the world seems to be strongly in favour of children being treated apart from adults. It is the usual custom in these special sanatoria for children suffering from pulmonary tuberculosis to have a school attached to the institution. This is particularly necessary, because practical experience has proved that many of the cases sent for treatment could, with more justice, be classed as suspects than as definitely tuberculous. They are thus able to receive education, and it is necessary that they should receive it.

The question of open-air teaching is a difficult one in this climate, but it can, and is, being carried out to some extent in our own city. The schools at Rathmines, Whitefriars Street, and Ringsend give open-air instruction in favourable weather; while other schools are considering the question, and show a tendency to increase the size of their windows and make them open more thoroughly.

The open-air school can be maintained in cold climates, as is shown by the fact that in America there were only three of these schools in 1908, and there were 63 in 1913. But we must remember that, although the temperature there is lower, the air is much drier than in these islands.

Sir George Newman in his last report referred to these open-air schools, and laid it down as a principle that they were not merely a school in the open air, but rather aimed to teach a way of life, and also a system of education and medical treatment. According to him the chief characteristics were :—

(1) Fresh air and sunlight.
(2) A proper and sufficient diet.
(3) Rest.
(4) A hygienic way of life.
(5) Individual attention.
(6) Medical treatment
(7) Special educational methods.

The first and second of these principles it is not necessary to dwell on before an audience of medical men, but the third is somewhat in danger of being overlooked; and from what I have read in the accounts of various open-air schools in England and abroad it is a fundamental law in their constitutions. What John Hilton wrote in 1860 is equally true to-day, though its precept is not in keeping with the spirit of our times. "Rest," he says, "is the necessary antecedent to the healthy accomplishment of both repair and growth," and you must have frequently had cause to observe that many children, particularly those of the poorer classes, do not appear to get a sufficient number of hours in bed, and you will, I feel confident, agree that rest in the recumbent position for from 1½ to 2 hours daily, during which time they are encouraged to sleep, must be of benefit to delicate children.

In his report, mentioned before, Sir George Newman estimates that about 10 per cent. of the children in London are in need of treatment in open-air schools. The most suitable cases are the anæmic and debilitated children who appear, he states, to be almost universally benefited by the treatment, though, of course, it has its limitations and its negations, for when we consider the uncertainty of our climate and the ill-clothed condition of many poor children, it will at once become apparent that it will be necessary to provide sufficient shelter for unfavourable weather, and for keeping the children warm; and indeed it appears to me that it is looking for trouble, and likely to bring open-air schools into popular disfavour if we attempt to educate a cold and wet child in the open air.

You will probably like to know what is the opinion of professional educationists on open-air schools. I have read the opinions of a good many teachers or ex-teachers on this point, and all appear to be of opinion that—in suitable surroundings—the open-air class is more attentive, better in discipline, more receptive of instruction, more interested in its work, and that they and their teachers leave the school much less fatigued than after an indoor day, while from the standpoint of health they are impressed by the improved general condition of the children and their unusual freedom from colds. The opinion of Mr. Henry Bryett, late head teacher of a school in West Ham, is worth quoting. He says:—"Educationists who are interested in experimental methods will be glad to know that the quality and amount of work done outside is better than that done by the same class working in the rooms, and that mental weariness, so noticeable at the end of a school day, is lacking in the classes that have done its school tasks in the play-grounds. The contrast between children of the open-air section and the same children from a room, at the close of the day, is most marked."

Although it does not really come under the title of this address, it will, doubtless, come into your minds that if this line of education is beneficial to delicate children, it would also benefit the healthy scholars, and experience has proved that this is so, and outdoor instruction applied to healthy children has proved such a success that some of the educational authorities in England have gone a step further and have initiated trips to the country lasting for a week or a fortnight. These trips are now officially recognised by the Board of Education, and are allowed to take place during school term, and the instruction given at these country outings is recognised for the purposes of grants. The cost of these educational trips has, in some cases, been as low as 6s. per week per child.

The thoroughness with which open-air instruction is carried out varies greatly in different places, and perhaps the most extreme *régime* is carried out at Laysin, under the direction of Dr. Rollier. It is designed more especially for cases of surgical and medical tuberculosis. The school is situated on the

mountains; here you may see teachers and pupils at lessons and at play clad in the scantiest of bathing costumes, a costume that is adhered to even when the snow is deep on the ground. The underlying idea of the treatment is insolation, and certainly the costumes adopted offer a very slight mechanical obstruction to the therapeutic measures.

In England and on the Continent, and in America, it is usual to provide ample covering and shelter for the pupils; this point is particularly attended to when the children are at rest either in the open or on a verandah, and if they work in the open it is usual to see that they are efficiently clothed, and also some arrangement is usually made for keeping their feet from coming in contact with the ground, while the duration of sitting still lessons is curtailed, and is often followed by some instruction or play involving physical exertion. In this connection I note in the time-table of one American school that the first 15 minutes of the school time-table is entered as "getting warm."

I have endeavoured to bring to your notice this evening some of the means that are being employed to promote the education of the physically defective child. I do not lay claim to any originality in the paper, and in the writing of it I am solely actuated by a desire to draw your attention to the comparative neglect of these children in Ireland. Viewed as potential citizens under present circumstances, they are likely to be brought up incapable of earning their livelihood. Many of my hearers are attached to the staffs of our Dublin Hospitals; in the children's wards will be found cases lying for lengthened periods. They are, in most cases, learning nothing even if well enough to receive instruction. The number is usually too small for a school, but it is not impossible that some private effort might be made to render these children less unfit mentally to earn their future livelihood. It appears to me that the problem of educating these children is especially important at present, for when the war is over money and men will be of the utmost importance in these countries, and the question of the well-being of the children will come more before the public and the State. I think it will be our duty as medical men to do all that we can to promote their welfare, and to endeavour to influence the public to take an interest in the problem of the delicate child; we must try to keep them alive, and it is cheaper for the State to educate them than to support them in later life out of the rates. It is, therefore, our duty, and also our interest, to endeavour by means of attention to their mental, moral, physical and technical education to make them into useful, if not fully effective, citizens, who will, in some cases at least, be capable of being made self-supporting, instead of, as is too often the case at present, becoming human derelicts living entirely on charity or the public rates.

SUBNORMAL TEMPERATURE IN TUBERCULOSIS.*

By ARTHUR K. STONE, M.D.,
Boston.

The occurrence of persistent subnormal temperatures in tuberculosis cases has attracted my attention for a long time, and I have been in the habit of calling the attention of my students to the fact that at a certain period of the disease, usually succeeding the active febrile stage, there is often a period when the temperature curve shows marked excursions in the subnormal, the temperature at no time rising above 98.6° F., and rarely fully reaching that point. The patients during this period of subnormal temperature are usually improving and making distinct gains, but it takes very little to give them exacerbations of real febrile temperature, lasting for a few hours to a few days. This period of subnormal temperature may last for weeks, the curve becoming less and less irregular if the improvement continues, and finally becoming a continuous straight line at 98.6° F. Until this latter condition is found, I do not allow my patients much more latitude in their movements than I do while in an active febrile stage. Incidentally, I do not like the term "subfebrile," often used to denote a range of temperature from normal, or 99° F., to 100° F. In talking to patients, we may feel justified in stating that such ranges are of little importance. If, however, they persist, I believe that they are of the greatest importance, and that it is our duty to find a cause. It may be the part of good practice in a very few cases to ignore such a temperature and to smash the thermometer, and say that no attention is to be paid to slight changes in the body temperature; but I feel that we must be very, very sure that such a procedure is correct, and that we are not deceiving ourselves, as well as our patients, when we say that subfebrile temperatures are of no consequence. To my mind, when there is a constant variation of the temperature from the normal, it means that there is a pathological process going on in the body which we may not be able to account for; that, however, is our ignorance, and not because the patient is in a truly normal condition.

The persistent subnormal temperature has become to me a part of the regular course of a case of tuberculosis that is on the whole progressing favourably. It does not have prognostic value, as a patient may from this stage again become febrile, although on the whole the tendency is, under favourable conditions, for the temperature curve to become a practically straight line.

Mild tuberculosis infections frequently show a rapid change from a febrile condition to this subnormal condition. This is graphically exemplified in some charts in a short paper recently (1913) published by Rundle, of England, demonstrating the beneficial effects of tuberculin when the temperature becomes subnormal and remains so, although he calls it "practically normal."

One finds the same condition occurring in tuberculous pleurisy. The fluid is withdrawn or spontaneously disappears; the fever disappears, and is replaced by this subnormal condition. All told, I have come to consider this persistent subnormal temperature so constant an accompaniment of tuberculosis becoming quiescent, that it may be considered of diagnostic importance.

During the past year it has become impressed upon me that these facts which I knew so well were not generally appreciated. I was asked by house officers to explain subnormal temperatures, and received looks of incredulity when I replied that it meant tuberculosis. They rejoined that they thought from their reading that sick cases of tuberculosis always had fever.

Later, a patient whom I saw in consultation gave me the following history:—She was an overworked mother. She had had a "cold" in the spring, which had persisted. For a month or two she had persistent fever, often over 100° F. Her physician had not been able to demonstrate bacilli or any definite lesion of the lung. After a time the cough had become less, and she had a persistent subnormal temperature, and all the time felt so tired and worn out that she could keep about with difficulty. She had been told that, because of the subnormal temperature, she could

* Transactions of the American Climatological Society.

not have tuberculosis. Not having tuberculosis she had not stopped and rested, neither had the physician insisted upon rest, as he would have had he made this diagnosis. There was little in the lungs on which to render a diagnosis, but the picture, to my mind, was typical of a mild infection overcome by fair climatic surroundings, with the consequent depressed physical condition and the manifestation of subnormal temperature which was persisting, and calling loudly for further rest to enable the cure to become complete. The persistence of the temperature in the subnormal, to my mind, was the typical thing to be expected, and not the condition to make the case perplexing.

The books on tuberculosis, I find, practically do not mention persistent subnormal temperature as a common symptom to be found in the course of the disease. Pottenger, of course, has made note of the fact. He says (p. 54), "There are types of temperature which persistently remain below normal, 97° to 99° F. [He gives temperature charts to illustrate.] Such cases seem to do well, and, in my experience, I have been unable to account for the condition." Also, in his paper on the "Study of Fever in Tuberculosis," read at Los Angeles in 1911, he states: "The continuously subnormal temperature we associate with both chronic fibroid tuberculosis and chronic tuberculosis of the ulcerative type during the state of quiescence." (Charts.)

These were all the references to subnormal temperature that I had found until Hawes's book, "Early Pulmonary Tuberculosis," appeared, in which he calls attention to the importance of a subnormal temperature combined with high pulse-rate as very suggestive of a probable diagnosis of tuberculosis. I entirely agree with him that a rapid pulse and the low temperature usually go hand in hand, although a number of my charts show a much lower range of pulse-rate than he suggests as the usual.

Practically all writers have noted that persons with tuberculosis may have a normal temperature while disclosing signs of activity on physical examination. Also, all have noted the fact that morning subnormal temperatures are common, but they assert that by afternoon the temperature rises to 100° F. or more. In Kleb's handbook Minor points to the diagnostic importance of the persistence of subnormal temperature in early cases. Incidentally he has some charts where there are persistent subnormal temperatures, or broken only by the fact that many persons unfamiliar with the details of the care of tuberculosis patients are frequently alarmed at low subnormal morning temperatures, citing the case of a surgeon who felt he had saved his patient from desperate collapse because he had found a morning temperature of 96° F.

With all of these observations I fully agree, and, further, I wish to emphasise that the continuance of a subnormal temperature, lasting over weeks, is not at all an infrequent condition in the course of improvement in a patient with tuberculosis.

To make sure of the number of cases that occur, I have been over the records of the House of the Good Samaritan since 1907. During that time we have had 378 cases of tuberculosis, many of them being brought there at the very end of life. Many had had steadily progressing disease, and only a few were in a really early stage, or, in spite of advanced progress on entrance, became arrested. Of the 378 cases treated, I found that fifty-eight of them, for two to four weeks at a time, and some several months, ran a subnormal temperature.

At the day camp at the House of the Good Samaritan, the patients were for the most part early cases; a large proportion, however, having well-marked signs and bacilli of tuberculosis present. I looked over the first hundred cases treated, and found that forty-one had periods of subnormal tmperature, several of them showing the condition for several months at a time, others for periods of a couple of weeks, broken by periods of fever for a few days to a week, and again returning to a subnormal range.

The question may be asked: What is a normal temperature, and what do we mean by a fever and by subnormal temperature? Is there not a variation in temperature in health that is greater than what we are accustomed to consider as the normal variation? Personally, I do not believe so. The physiologists tell us that there is some variation in temperature in the healthy person. This diurnal swing is usually considered to be confined to about 1° C., being lowest during the early morning hours and highest in the late afternoon. The temperature is also stated to be affected by food, and, at times, by exercise.

In order to be sure that the temperatures of patients were persistently subnormal when so appearing on a daily morning and evening chart, I have from time to time had a number of cases tested by having the temperatures verified, by having them taken at three-hourly intervals, and later at two-hourly intervals, to conform to the strictest requirements which I have found set forth as desirable.

Many times, when I have seen subnormal temperatures registered, I have requested the head nurse to look into the methods of the nurses recording the temperatures, and have been assured that the observations recorded were correct. The subnormal tmperatures were found equally in the heat of summer and the cold of winter. On the whole, I am quite sure that so far as the observations go, the maximum subnormal are correct; that the minimum may be occasionally lower than recorded I am not so sure.

Blake's observations on Marathon runners made it seem improbable that the irregularities in temperature which are reported could have been observed in truly normal persons. Those Marathon runners showed at the end of their great exercise a rectal temperature of from normal to 99.2° F., and rarely more. My speculation is that many of the so-called normal individuals who have shown marked irregularities of temperature would, on careful examination, have been found to have had tuberculous lesions or some other pathological process which would have accounted for their unstable heat regulation.

However, subsequent investigations shall decide in such cases, for the practical clinical man, when there is no special condition leading to a persistent rise in temperature or to a persistent subnormal temperature. Either of these conditions observed over a long period of time makes the diagnosis of tuberculosis probable.

It has surprised me, since I have been interested in this matter, how few of the conditions where there is general depression were accompanied by subnormal temperature. The most marked, persistent, subnormal temperatures are, in my experience, found in mitral disease of the heart, especially stenosis with moderate failure of compensation.

Renal cases of severe enough type to require hospital treatment often show this condition. Cancer in its later stages may or may not; and, in my experience, tired women, and those whom we sometimes call neurasthenics, rarely show the subnormal, even during the periods of prolonged rest.

Of the other forms of tuberculosis, tuberculous peritonitis may or may not have subnormal temperature. In the cases I have followed, I have not been impressed with its frequency as a special sign to be depended upon in diagnosis.

Cases of bronchiectasis and fibroid phthisis, and cavity formation after non-tubercular infections, all of these interfering with the action of the lung, can give rise to prolonged subnormal conditions; but these are not the cases where this range of temperature comes into active play as a help in diagnosis.

Dr. B. G. R. Williams (of Paris, Illinois), has reported that he had observed a form of "grip" where there was a persistence of temperature of from 94° to 97° F., with marked depression. In the cases usually called "grip" or "influenza," my general experience has been that the return to normal has been moderately rapid. In correspondence with Dr. Williams, he states that he has not noticed so far that the cases in which he has noted subnormal temperature had developed active tuberculosis. It goes without saying that in doubtful cases everything must be taken into consideration when one sees his patient and makes his diagnosis. Cardiac and renal conditions must not be allowed to escape notice, and must be surely eliminated before the subnormal temperature alone assumes special importance; and then it must be borne in mind that there is the possibility that convalescence from various bacterial infections may be found to have periods of subnormal temperature which must make us careful in our diagnosis, although personally I do not believe that they enter into consideration to any great extent. And I say this, in spite of the statement in Krehl's "Clinical Pathology" that subnormal temperatures are more common than is generally supposed. They are often seen during convalescence from infectious diseases; and in such instances they are generally due to a diminished production of heat with an inefficient heat regulation.

PYORRHŒA DUE TO ORGANISMS OTHER THAN AMŒBAS.

By GEORGE HOWARD HOXIE, A.M., M.D.,
Kansas.

Since the publication of the work of Bass and Johns on pyorrhœa, there has seemed to be a tendency among dentists and many medical men to administer emetin in all cases of dental infections without establishing the presence of the endamœba. That the endamœba is not the cause of all cases diagnosed as pyorrhœa by competent dentists is shown by the history of such cases as that outlined below. Its publication (*a*) at this time seems, therefore, justified.

History.—A. L., man, æt. 18, high school student, first seen August 2nd, 1912, complained of attacks of sore mouth complicated by fever, earache and knee pains. The family history was negative except for tuberculosis in the second generation on the mother's side (no contact). The patient had been a healthy infant until three months of age, when he had otitis with a purulent discharge. The sore mouth began at the age of three years, when the attacks began suddenly and recurred every three weeks. He had the usual children's diseases, but was in spite of it all a healthy-appearing child.

Present Illness.—A febrile attack of stomatitis, glossitis, or gingivitis (or all three) occurs every fourteen days and lasts from three to five days, ending with the removal of one or more necrotic nodules about one-eighth inch in diameter. His ears "break" and "run" at longer intervals (for example, four times in the last seven years). His left knee swells up and pains him about five days from every four to eight weeks.

The attack begins with a general malaise and fever, followed by a soreness of the mouth, gradually localising into a swelling of the mucous membrane of the particular part affected. In the centre of this area develops a raised nodule, red, hard, but not very tender. This can be seized with forceps and pulled out at the end of from three to five days without much discomfort to the patient, leaving a clean granulating surface. No distinct scar is left. The attacks recur without reference to habits, time of year, or food. The knee attacks began last year.

Examination.—The patient is a sturdy young man, self-controlled and showing no neurotic stigmata. The weight varies from 142 to 150 pounds. Systolic blood-pressure, from 150 to 138. Chest shows some roughened respiratory sounds. Heart sounds loud and sharp. Lymph glands palpable in neck, axilla and groin. (The cervical glands swell at the time of the attacks.) Spleen not palpable. Ears negative except for scars on membrane. Nasopharynx red and "sticky." Mouth shows about half of the teeth gone and some of the remainder loose. The inflammation about the teeth has gradually destroyed the alveolar processes of most of the teeth, so that the roots are exposed. In some cases pus exudes from the socket on pressure, but in most cases none appears, because of the frequent cleanings at the hands of the dentist. Left knee shows now little or no inflammatory disturbance.

August 12th, 1912, the lower lip was swollen and red. Attack began two days ago. The right ear was discharging. Malaise was still increasing; pulse, 108; temperature, 101°. Bad taste in mouth. Pain in right ear, lip, gums. Tongue flattened and coated with a glairy membrane that could be washed off with an astringent spray, leaving a reddened and glossy mucosa. Culture from ear showed a small diplococcus.

In the interval following this attack the patient was given a course of "rheumatism phylacogen." No result, beyond the temporary chills and malaise.

Following his next attack, a course of stock staphylo-streptococcic vaccine was given (a course of autogenous vaccine had been given eighteen months previously). The following attack (October 2nd) was almost free from the constitutional symptoms, and only one nodule appeared; the next attack, however, was about as usual (October 22nd). The vaccine treatment was continued, but without distinct effect. Attacks were at their height November 6th, 13th, and 27th. The bacteriologic study of this last nodule showed long red rods and various cocci. December 2nd, an autogenous vaccine (Hecker) was started. In spite of this an extrordinarily severe attack occured from December 14th to 18th.

January 11th, 1913, the patient was just over a week's attack; fever to 101°; two ulcers on left side of tongue, one on lip, one on buccal-gingival fornix; all on left side of mouth. In this attack the invasion was slow and stopped for two days. Interval between attacks now sixteen days.

January 17th, there was "rheumatism" of left knee and fingers of left hand. This cleared up in three days, but the knee was more or less sore in the evening for a month.

The last attack of otitis occurred January 25th, and lasted only two days.

March 15th, a culture made from the depths of a freshly-pulled necrotic plug showed on potato

(*a*) *Journal of the American Medical Association*, November 27, 1915.

in twenty hours a mould—a closely-felted, adherent white growth with black spot in centre; small branching colourless mycelia with conical spores. On blood serum, a looser growth, mycelia white, sporangia yellowish. On agar the growth was white with ovoid spores, but when transplanted to potato became black (Aspergillus niger). In glucose bouillon, filaments (leptothrix?) with vibrio-like forms.

April 4th, a culture from material from the depths of the ulcer immediately after the nodule had been pulled out in glucose bouillon showed chains of minute spore-like bodies and a few cocci.

April 17th, the pseudomembrane on the tongue showed mycelia under the microscope.

May 31, the "rheumatism" that had been prevailing since May 23rd stopped when the plug developed in mouth yesterday.

After attempting to eradicate the sores by curettage and caustics, it was found that the nodules appeared about the tooth-sockets or on the parts of the tongue coming in contact with the bad teeth.

October 29th, 1913, culture from the bottom of a plug showed a rich growth of Aspergillus fumigatus. But a smear from the same plug showed masses of a minute diplococcus, and through them threads smaller than an ordinary mycelium, which stained blue with Wright's stain.

January 2nd, 1914, a tooth was extracted. From the root a culture showed a diplococcus, a staphylococcus and a streptothrix, all decolourised by Gram.

February 24th, ulcer in anal fold. Inguinal glands enlarged and tender. A sore in left buccal mucosa opposite last lower molar, and one on tongue. (Patient has had two or three of these anal ulcers before. They occur coincidently with the oral lesions.)

March 19th, culture on blood serum from the depths of an oral ulcer grew at room temperature a rod that united in long mycelium-like branches not decolourised by Gram.

March 21st, 1914, a vaccine made from these cultures was started. This caused some systemic reaction, but seemed to bring on the knee inflammation.

May 22nd, 1914, neosalvarsan, 0.9, intramuscularly.

June 1st, 1914, new attack, as before.

August 31st, 1914, withdrew 35 c.c. of clear fluid from left knee. Culture showed a diplococcus not decolourised by Gram and the branching sporulated organism already found in the mouth.

December 15th, 1914, all his teeth except the two last molars removed. This brought on a severe attack with much hæmorrhage from the sockets, which continued intermittently until December 20th.

August 13th, 1915, the patient has been much better and has lost very little time from his University work. But the attacks still recur at seventeen-day intervals. He is now suffering from another ulcer in the anal fold.

Summarising the record, we have to do with a recurrent fever of about seventeen years' duration. The focus has been the alveolar processes and the mucosa of the mouth, from which the body has been invaded. The particular parts, aside from the mouth, which have shown evidences of infection, have been the left knee (bursitis) and the anal fold (abscesses). The length of the attacks has varied from three to ten days. The organisms most constantly found have been a diplo-streptococcus and a mould. The disease has proved resistent to arsenic (salvarsan, arsacetin and the trioxid), the salicylates, and other systemic and local germicides, as well as to vaccines, both autogenous and stock, single as well as mixed.

The question of great interest is whether we have to do with an organism showing a cycle of from fourteen to seventeen days, or whether it is a case of temporary immunity. Repeated examinations have failed to reveal any amœbas. Animal inoculation was negative.

To me it would appear that the causative organism is one which is ordinarily non-pathogenic, but which has acquired parasitic power in the tissues of this patient.

It is perhaps needless to say that all the conventional drugs have been used at one time or another by the various physicians who have treated the patient. The dentists employed have been the best in the city. The case was worked up from the dermatologic standpoint by Dr. R. L. Sutton (*a*) and published under the caption, "Periadenitis Mucosa Necrotica Recurrens." The diagnosis of pyorrhœa was given by all the dental attendants, including Dr. Frederick Hecker, the author of a monograph on that subject.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

PERISTALTIC PERSUASION.

To the Editor of The Medical Press and Circular.

Sir,—In your article on the above, in this week's issue, you remark in the last paragraph on the importance of the skeletal muscles of the abdominal wall as an aid to peristalsis. Herein you do a true verdict give according to the evidence.

Until the last three weeks, during which I have been confined to bed by a fracture, I had no idea of the part played by the abdominal wall muscles in the act of defecation. My left lower extremity being incapable of flexion on the abdominal wall, the action of the obliques and recti have been all but inhibited. Ordinarily I hardly know the meaning of constipation as a personal experience, but now I find the act of stool is in its effort allied to what a male mind conceives of parturition. One understands now in quite a practical way what the troubles of patients are, in whom the anterior abdominal muscles from various causes are no better than so much limp rag. Should I ever have to treat a patient for a similar lesion to my own, and who can afford a trained nurse, I should certainly see that her daily duties included massage of the abdomen, with or without the stimulation of those reflexes described in Dr. McClure's address.

I am inclined also to ask whether the whole cycle of peristalsis and defecation is so geared up together that when the action of the muscles referred to is cancelled out or weakened, there is also a diminution not only in peristalsis, but also in the secretory activity of the mucous glands of the intestinal tract. In my own case I observe that what should be an ordinary motion is often reduced to mere sheep-droppings. Moreover, a mild pill of cascarin, aloin, and podophyllin takes generally eighteen hours to set up action.

This is not, alas, a time for making of homes; but, should any reader think in the happier days to come of building a house, he would do well to have his closet fittings carried out to allow of the squatting posture being adopted. This, the normal posture for the act, powerfully aids the anterior abdominal muscles. I cannot now turn up the reference, but I well remember one writer pointing out that the constipated life often dates from the time

(*a*) Sutton, R. L., *Jour. Cutan. Dis.*, 1911, XXIX., 65.

when a child is promoted from its pot-de-chambre to the ordinary lavatory seat, whereon these muscles act at such mechanical disadvantage.

I am, Sir, yours truly,

DELTA.

Cambridge, February 3rd, 1916.

THE INSURANCE ACT—PANEL PRACTICE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Your clever and witty contributor, "Delta"—who has the sympathy of all in his unfortunate accident, which has, however, not clouded his powers of expression—has, I think, convinced everyone that panel practitioners are not paid for each disablement case as such, but that he may get something out of the number who have not chosen a doctor. That is another matter altogether, and shows the sloppy state of finance of the Insurance Act. I drew Dr. Richmond's attention to the paragraph, but he has failed to substantiate his statement or correct your contributor, and therefore the only conclusion is that he was mistaken in his statement that "there was no truth in the statement that practitioners on the panel receive no remuneration in respect of treatment provided for insured persons in receipt of disablement benefit." Misleading statements are lamentable and do not bolster up any cause.

I am, Sir, yours truly,

JAMES HAMILTON.

Chelsea, February 5th, 1916.

HEALTH OFFICIALS AND ALCOHOL.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I always consider it to be unfortunate, for the scientific aspect of the profession and its reputation for common sense among the lay public, that resolutions should be passed such as the one quoted in the MEDICAL PRESS AND CIRCULAR (January 26th, p. 86) by the Medical Officers of Health of Nova Scotia. The statements are extravagant, misleading, and could not be substantiated before a congress of scientific men with any expert knowledge of alcohol. If the resolution had been framed to read "that the *immoderate* use of alcohol," etc., one could not find fault with it; but the moderate use of alcohol has neither a pernicious nor injurious effect on the public health of any country.

We, as physicians, should be careful to show the lay public that we always take a perfectly impartial view on any subject, and our opinion, when given, is founded on scientific equity.

I am, Sir, yours truly,

THOMAS DUTTON, M.D.

London, W.
February 2nd, 1916.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

SECTION OF OPHTHALMOLOGY.

MEETING HELD FEBRUARY 2ND, 1916.

Under the Presidency of MR. PRIESTLEY SMITH.

THE following cases were shown: Mr. J. Herbert Fisher, arterio-venous aneurysm; Mr. Arnold Lawson, coloboma of the upper eyelid; Dr. Attlee, congenital dermoid of the conjunctiva; Mr. G. H. Pooley, lymphoma of orbits.

A paper by the late Mr. George Coats was read by Mr. AFFLECK GREEVES, entitled

THE CAUSE OF THE OPHTHALMOSCOPIC APPEARANCES IN AMAUROTIC FAMILY IDIOCY.

The author, in this paper, deals with a contribution by Dr. F. E. Batten and Mr. Stephen Mayou on "Family Cerebral Degeneration with Macular Change," in which those authors state that there is a close relationship between these cases and the instances of amaurotic family idiocy, the only difference between them being that the macular region in amaurotic family idiocy shows a much more marked œdema of the internuclear layers, and therefore a white area around the macula associated with a hole or thinning of the retina at the fovea due to œdema, their conclusion being that œdema of the internuclear layers was present in both diseases, but much more markedly in amaurotic family idiocy. In the present paper the author says that for a histological study of the retina the material must be absolutely fresh, as *post mortem* changes begin two hours after death; fixation must be perfect (Zenker's solution being the best), and the method of cutting must be suitable. Coats considered that in the retina, apart from the occurrence of œdema, the macular changes show marked differences in the two diseases, and these are enumerated. He repudiates the view which had been ascribed to him that the ophthalmoscopic appearances in amaurotic family idiocy are due to coagulation necrosis. Though the particular form of chromolysis, vacuolisation, etc., which characterise family cerebral degeneration closely simulates that which is seen in amaurotic family idiocy, the underlying cause may be different; and the race selectiveness of amaurotic family idiocy should cause hesitation in identifying it with a disease which is not race selective.

Mr. MAYOU, in discussing the paper, agreed that formalin, which was used in the case described by Dr. Batten and himself, was not a good fixative, but in one of the cases reported he thought the appearances could be fairly relied upon, except in regard to œdema in the internuclear layers.

Mr. TREACHER COLLINS thought the paper might well have been entitled "Causes of Opacity of the Retina," as it dealt with the wider subject. In the class of case investigated by the author, he seemed to have established that the opacity of the retina was due to a change in the ganglion cells.

Mr. J. HERBERT PARSONS said he had cut sections from a case of amaurotic family idiocy, and there were large œdematous spaces, similar to those in Dr. Batten's and Mr. Mayou's case, and he did not think they could be explained merely as the result of bad fixation. A good fixative, like the Zenker, might cause an artefact appearance in the opposite direction to that alleged in this paper. He regarded amaurotic family idiocy as one of the most sharply defined clinical entities known.

Mr. HOLMES SPICER and Mr. AFFLECK GREEVES contributed a paper on

SUPERFICIAL LINEAR KERATITIS.

The condition was one in which there were superficial ridges of epithelium raised above the level of the cornea, mostly running in vertical lines, grey and tapering, and having along their course bulging node-like appearances. They had tapering ends, and did not extend quite to the limbus. They not uncommonly showed punctate staining, but there was no iritis. The tension of the eyeball was nearly always *minus*, and during such times the vision was definitely impaired, though it recovered when the normal tension was re-established. It differed from dendritic ulcer (which it appeared to simulate), especially in the reduced tension. No measures which he had employed prevented recur-

rences. A number of drawings and microphotographs illustrated the contribution. It was discussed by Messrs. Cole Marshall, J. B. Lawford and D. L. Davies.

Mr. Walter Edmunds read a paper on

CATARACT IN EXPERIMENTAL THYROIDECTOMY.

He said he did not think the lens opacity was due to disease of the eye itself; in the dogs dealt with the pupil was active, and there was perception of light. He thought the cataract was due to the general nutritional changes following the removal of the thyroid gland, and the fits seemed to be due to that. Similar instances had been recorded in man. The cataractous changes which he found were not of the lamellar or any special type. When the parathyroids were also removed, the animal quickly sickened and died, the death being preceded by tremors.

The paper was discussed by Messrs. Herbert Parsons and Herbert Fisher, and Mr. Edmunds replied.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Pathology.

Meeting held Friday, November 26th, 1915.

R. J. Rowlette, M.D., F.R.C.P.I., in the Chair.

EXHIBITS.

Dr. Bronte showed (1) A case of endocarditis with large vegetations on both mitral and aortic cusps; patient had history of frequent attacks of gonorrhœa, but sections showed Gram-positive cocci only. (2) The viscera of a young girl showing congenital absence of the left lung with displacement of heart leading to a hyaline formation of the pericardium at the point of contact of apex of heart. The intestine was gangrenous, although no thrombosis or other impediment to vascular flow was to be found. Both kidneys showed connective tissue proliferation and parenchymatous degeneration, and the liver was sclerosed and fatty.

Prof. Mettam exhibited a melanotic spindle-celled sarcoma from the prepuce of a dog. There were secondary deposits in the lungs and mesenteric glands; also in the auricles, ventricles, interventricular septum and the papillary muscles of the heart. He also exhibited the head and spleen from a case of osteomalacia and myeloid leukæmia in a bear. The subject, a female, about four or five years old, had some difficulty in swallowing during life.

At the autopsy there were numerous petechiæ found on the serous surfaces. The liver was bile-stained, though otherwise normal. The spleen was enlarged, and histologically it had the appearance of actively proliferating red marrow. Premyelocytes, granular myelocytes, leucocytes, megakariocytes, and erythroblasts were numerous. Hæmosiderin pigmentation was present The normal splenic tissue had almost completely disappeared, there being only traces of the Malpighian bodies and atrophied trabeculæ present. The thyroid appeared to be normal. The lungs showed numerous infarcts which contained normoblasts. Head Lesion:—The upper jaw was greatly deformed by two elongated curved swellings replacing the normal gums. The teeth were irregularly placed, and the interdental spaces widened. The lower jaw appeared normal but somewhat sclerosed. Opposition of the jaws was impossible. There was no softening or deformity of the other bones.

(3) Prof. Mettam also exhibited for comparison the head of a spider monkey with osteomalacia. He said he had met the condition in three other female monkeys; these cases showed softening and pliability of all the bones and there was hypertrophy and hyperplasia in the parathyroids of each, the thyroids proper being degenerated. He considered it was not improbable that excessive parathyroid internal secretion might lead to decalcification.

Dr. R. J. Rowlette asked whether melanotic sarcoma was of common occurrence in the dog and whether it was influenced by breed?

Prof. Mettam, in replying, said that sarcoma was common in the dog, it was not affected by breed except in the case of the so-called "infective sarcoma," which was more common in bulldogs and St. Bernards. He had recently met the condition in an Irish terrier. With regard to osteomalacia, he said it was common in the goat, and he had met two cases in pigs of one litter. The disease was comparatively common in the south-west of France. He stated that leukæmia was common in fowls and was infectious. If the spleen of a leukæmic fowl were emulsified and filtered, the filtrate would reproduce the disease when inoculated into another fowl.

Dr. Boxwell exhibited a specimen of carcinoma of the thyroid gland. The case was reported in The Medical Press and Circular of December 29th, 1915, p. 605.

Dr. R. J. Rowlette commented on the presence of connective tissue in the tumour mass in the vena cava. He regarded cancer as consisting of two elements, the epithelial tissue and the connective tissue, the preponderating element in different cases depending upon the rapidity of its growth; when rapid, the epithelial element preponderated; when slow, the connective tissue was more in evidence.

Prof. Mettam said that goître in animals had a marked tendency to invade the thorax. He asked was there any evidence of sarcoma? As to the origin of connective tissue in an epithelial tumour, he stated that when cancer with its supporting stroma was inoculated experimentally, the connective tissue disappeared, whereas the epithelial part continued to grow, favouring the view that the connective tissue of cancer was a secondary and not a primary element of the tumour.

Dr. Boxwell, in reply, said that no sarcomatous element had been found. He considered it was very remarkable that the tumour was growing in the blood stream in the vena cava and it quite upset his preconceived ideas as to the vitality of cancer cells in the blood; he could not explain the presence of the connective tissue in this part of the specimen.

Dr. T. T. O'Farrell exhibited photographs and microscopical sections of a case of melanotic carcinoma (alveolar sarcoma) of the foot. The patient, a woman, æt. 75, was always quite healthy except for some uterine condition which necessitated an operation in April, 1913. In May, 1915, a black mark appeared beneath the little toe of the left foot; it gave her little trouble till July and August when further spots appeared on the shin; in October a lump appeared in the groin. She was admitted to hospital, but owing to the rapid formation of these metastases and the age of the patient it was considered inadvisable to operate. The primary growth was about the size of a Tangierine orange, was darkish in colour, but otherwise not unlike an epithelioma. The secondary deposits around the lower third of the leg were mainly subcutaneous, some having the appearance of small black marbles; there were more black spots up the

leg and thigh. Sections made from one of the marble-like deposits showed a layer of squamous epithelium beneath which was some fibrous tissue in which were lymphatics filled with tumour cells, and underlying this was solid tumour substance of alveolar sarcoma (carcinoma). The melanin pigment was deposited as a layer in the more superficial cells of the tumours, some pigment being present in the connective tissue directly beneath the squamous epithelium.

(2) Dr. T. T. O'FARRELL also showed a chorion-epithelioma malignum which had been previously exhibited at the Obstetrical Section of the Academy on November 19th, 1915, by Dr. A. Smith. The patient, æt. 40, had had many children. She aborted in December, 1914, during the tenth week of pregnancy; subsequently there had been a heavy fœtid discharge. The uterus was removed by operation in October, 1915. There was no evidence of metastases. The specimen measured: height, 11 cm.; breadth, 10 cm.; thickness, 7 cm. The dilated cavity of the uterus was occupied by a large, spongy, hæmorrhagic mass; on section, the latter was seen to be directly connected to the uterine wall, but somewhat free towards the cervical end. Microscopical sections showed three more or less distinct zones: namely, the outer muscular wall of the uterus; an inner of laminated septic blood clot infiltrated with polymorphonuclear leucocytes; and an intermediate comparatively thin zone of tumour cells. The neoplastic zone showed two distinct types of elements:—(1) One consisting of rather darkly staining multinucleated protoplasmic masses which in places appeared as large giant cells, but in others lengthened out into bands of varying thickness which followed the line of blood clefts—syncytial protoplasm; (2) The other element consisted of clear distinct cells, partly vacuolated and containing rather faintly staining nuclei—Langhans' cells. The tumour substance was seen to invade blood spaces and the muscular tissue. There was no decidual or glandular tissue present, the tumour directly impinging upon and infiltrating the muscular structure.

He briefly discussed the present theories as to the formation of these and like tumours and their classification as heterochthonous blastomata.

Dr. R. J. ROWLETTE said that in his experience chorion-epithelioma was rare in Dublin; he could recall only four recorded cases. The tumours were described as being of three types:—(1) Containing only the Langhans' element; (2) containing both syncytial and Langhans' elements; (3) containing both the above *plus* definite chorionic villi. He had met a case of the first type, there being secondary deposits in the vagina and lungs.

MR. WILLIAM WALLS, of Southport, retired surgeon, left £28,351.

MISS CLARE HELEN THORNTON, of Regent's Park, left £200 to the Alexandra Hospital for Children with Hip Disease.

DR. A. T. DE MOUILPIED, District Inspector for the elementary schools in Greenwich, Lewisham and Woolwich, having joined His Majesty's Forces, Dr. P. B. Ballard will take control during his absence.

DR. PASK, one of the Lancashire County Council's Senior Tuberculosis Officers, who has returned to his duties after a year's absence with the colours, has been appointed Medical Superintendent of the High Corley Sanatorium at a salary of £450 per annum. Before his present appointment Dr. Pask was Medical Superintendent to the Salterley Grange Sanatorium, near Birmingham.

SPECIAL REPORTS.

AWARDS TO MEDICAL MEN FOR SERVICES IN THE FIELD.

A SPECIAL supplement of the *London Gazette* contains the latest list of awards for services in the field and in connection with nursing.

ORDER OF THE BATH.

The King has been graciously pleased to give orders for the following appointment to the Most Honourable Order of the Bath, for services rendered in connection with military operations in the field. To be Additional Member of the Military Division of the Third Class, or Companion, of the said Most Honourable Order:—

Australian Force. — Lieutenant-Colonel Wilfred Wannostrocht Giblin, Australian A.M.C.

ST. MICHAEL AND ST. GEORGE.

The King has been graciously pleased to give directions for the following appointments to the Most Distinguished Order of St. Michael and St. George, for services rendered in connection with military operations in the field. To be Additional Members of the Third Class, or Companions, of the said Most Distinguished Order:—

Colonel Charles Henry Hale, D.S.O., A.M.S.

Australian Force.—Lieutenant-Colonel Albert Hobart Sturdee, Australian A.M.C.

DISTINGUISHED SERVICE ORDER.

Major Walter Rothney Battye, M.B., F.R.C.S., I.M.S.

Major Dudley Sheridan Skelton, R.A.M.C.

Captain Edward Selby Phipson, M.B., I.M.S.

MILITARY CROSS.

Temporary Captain James Heslop Aikman, M.B., R.A.M.C.

Temporary Captain George D'Rastrik Carr, R.A.M.C.

Captain Charles Conway Fitzgerald, R.A.M.C. (T.F.).

Captain Frederick John Henry Tobias Frere, M.B., R.A.M.C., Special Res.

Captain William Rutherford, M.B., R.A.M.C. (T.F.).

Temporary Lieutenant Harold Benge Atlee, M.D., R.A.M.C.

Australian Force.

Captain Edward Thomas Brennan, Australian A.M.C.

Captain Clyde Wentworth Thompson, Australian A.M.C.

OBITUARY.

SIR F. H. LOVELL, C.M.G., F.R.C.S., LONDON.

SIR FRANCIS HENRY LOVELL, Dean of the London School of Tropical Medicine, died in London on January 28th, in his 72nd year.

Educated at St. Bartholomew's Hospital, he qualified M.R.C.S. in 1865 and L.S.A. in 1867. He was Colonial Surgeon of Sierra Leone, 1873-1878. Here he saw for himself how terrible were the effects of fevers of the malarial and yellow type. He became Chief Medical Officer of Mauritius and member of the Legislative Council, 1878-1893; later he was appointed Surgeon-General of Trinidad and Tobago and a member of the Executive and Legislative Councils, 1893-1901. He retired from the Colonial Service in the latter year, and in 1903 was appointed Dean of the London School of Tropical Medicine. In 1909 he paid a visit to the West Indies with the object of interesting some of the Colonies in the work of his school, and also of enlisting their support for this great enterprise. He visited Barbados, the Windward Islands, the Leeward Isles, Jamaica, Trinidad, and British Guiana. From a financial point of view also the tour was a success. Sir Francis was anxious to have sufficient funds to conduct research work adequately and to be able to send out expeditions to the Tropics when occasion arose. This object he realised.

Sir Francis was created C.M.G. in 1893 and knighted in 1900.

LIEUTENANT-COLONEL STANLEY BOYD, F.R.C.S., R.A.M.C., LONDON.

LAST week we recorded the death of Mr. C. Stonham, surgeon to Westminster Hospital. To-day we have to announce the decease of another well-known London surgeon, Mr. Stanley Boyd, which occurred on February 1st at his residence, 134 Harley Street, W. Like many of the hospital surgeons, Mr. Boyd had been granted a commission in the R.A.M.C. (T.F.), and held the rank of Lieutenant-Colonel. Stanley Boyd received his professional training at University College Hospital, and graduated M.B., B.S.Lond., with honours, in 1879, taking the F.R.C.S. in 1881. After holding various house appointments at his old hospital, he became a member of the staff at Charing Cross, and at the time of his death was surgeon to the hospital and lecturer on clinical surgery. He had been examiner in surgery at Cambridge University. He contributed extensively to surgical literature. His death, at the comparatively early age of 59, will be regretted by a wide circle of friends, both in and out of the profession.

DR. JOHN HUMPHRY, M.R.C.S., L.S.A., READING.

THE death has occurred of Dr. John Humphry, who for over 50 years was medical superintendent to the Bucks County Asylum, Stone. Born in 1822, he was educated at University College Hospital, and qualified as M.R.C.S., L.S.A., in 1849. After spending two years at the London Fever Hospital and five years at Birmingham Union Infirmary, he went in 1855 to the Crimean War as a civilian surgeon in charge of a hospital at Renkioi in Asiatic Turkey. In the following year he was appointed medical superintendent at Stone, which position he occupied until the beginning of 1908. During that period the number of patients for whom accommodation was provided increased from 200 to 700. On the completion of 50 years in office Dr. Humphry received from the Visiting Committee, members of the Bucks County Council, and other gentlemen in the county an illuminated address with a service of plate.

DR. T. J. WEBSTER, M.R.C.S., L.S.A., J.P., MERTHYR.

THE death has occurred at Merthyr of Dr. Thomas James Webster, M.R.C.S.Eng., L.S.A., at the age of 72 years. Deceased qualified M.R.C.S., L.S.A. in 1865, and in the early seventies commenced practice at Merthyr. For several years past his only son, Dr. Vivian Webster, had been in partnership with him. The late Dr. Webster was for many years a justice of the peace for the county. He is survived by his widow, son, and five daughters.

DR. H. D. PITT, L.R.C.P., L.R.C.S., WEST SMETHWICK, BIRMINGHAM.

THE death occurred on 3rd February at West Bromwich, of Dr. Herbert D. Pitt, who had been ill only a short time.

Dr. Pitt, who was educated at Birmingham and Edinburgh, qualified L.R.C.P. and S. in 1901. He was well known in connection with the St. John Ambulance work, and was medical officer in connection with classes at a large works in the district. Of late years he took the greatest possible interest in the voluntary aid detachment of the Red Cross Society, and his contingent at West Smethwick was first in the county of Staffordshire to be recognised by the War Office.

Since the outbreak of war the detachment has contributed largely to the R.A.M.C.

DR. KINGSLAND, M.R.C.S., L.R.C.P., SMALL HEATH, BIRMINGHAM.

DR. ALFRED KINGSLAND, of Small Heath, has died from a fracture of the base of the skull following upon a fall at his home. He was a member of a very old Birmingham family. He was educated at King Edward's Grammar School and at Queen's College, Birmingham, and qualified M.R.C.S. and L.R.C.P. in 1890. Dr. Kingsland was 49 years of age and leaves a widow.

DR. HOWARD SMITH, OF KELSO.

BY the death of Dr. Samuel Howard Smith, at a late hour on Friday, January 31st, Kelso has lost one of its outstanding personalities. For eight years Dr. Smith, who was a native of Cheshire, had been intimately connected with the life of the Tweedside community, to which he first came as assistant to the late Dr. Turnbull. He was a Licentiate of the Colleges of Edinburgh and Glasgow. Among other positions in Kelso he was Medical Officer for Kelso, Makerston and Ednam, Public Vaccinator and Medical Officer for the School Board, and was the Visiting Surgeon for the Cottage Hospital. Besides discharging these varied duties in exemplary fashion, he found time to be healthily interested in all forms of sport in a sporting district. He will be sadly missed in the countryside.

LABORATORY NOTES.

"BYNOGEN" (Messrs. Allen and Hanburys, Ltd).

A SAMPLE of this preparation has been forwarded to us by Messrs. Allen and Hanburys, Ltd. "Nerve Foods" containing casein and glycero-phosphates have been largely advertised of recent years. The composition of "Bynogen" suggests that it possesses marked advantages as a tonic food. It contains pure soluble milk protein, together with the glycero-phosphates of lime, soda, and magnesia in combination with specially prepared dextrin-maltose. We consider the addition of the malt product a distinct advance. It renders the product easy of assimilation, and largely increases its nutritive and tonic value. Moreover, it ensures palatability—no small matter in the class of case in which "Bynogen" is indicated.

We find that "Bynogen," which is in the form of a fine powder, mixes readily with milk and with water. It can, of course, also be taken alone or mixed with other foods.

"LYCRYL" (Eucryl, Ltd., 61-63, Lant Street, S.E.).

THIS preparation is also designated the "All-British Lysol." Lysol had a well-deserved reputation as an antiseptic of high surgical value, and from our experience we do not hesitate to say that "Lycryl" will be found equally effective. It contains a high per- of obesity in general, except in so far as the fatness centage of free cresols, from which have been removed the corrosive and irritating elements. It mixes well with water, forming in half to one per cent. solution an excellent antiseptic for general surgical or obstetric purposes.

MEDICAL NEWS IN BRIEF.

Glasgow Infant Health Visitors' Association.

THE annual report of the Glasgow Infant Health Visitors' Association states that there were 7,336 attendances on the doctor at the infant consultations. At the dinner table for nursing and expectant mothers there is a daily attendance of from 20 to 30, and a marked improvement in the health of mothers and children has been noted. Applications for milk in 1915 numbered 184, compared with 416 in 1914. The difference is stated to be due to the fact that work is plentiful and wages good, and also to the Government allowance to soldiers' wives and the operations of the Soldiers' and Sailors' Families Association. The Advisory Committee have attended to all necessitous cases, and many mothers and babies have improved in health as the result of the help given. Details are given of the work carried on by the 19 branches of the association, which has over

400 voluntary visitors. The infants under visitation numbered 5,684, as compared with 5,429 in the previous year. The number visited until they attained the age of one year was 2,051, as compared with 1,664 in 1914.

War Bonus for Doctor.

AT a meeting of Caersws Board of Guardians (Mont.), Dr. W. Llewellyn Davies was appointed Medical Officer for the Llanidloes district in succession to Captain R. J. Jones, who is now with the R.A.M.C. The salary paid to Dr. Jones was £60, and Dr. Davies, the only applicant for the post, asked £90. A committee who met him and came to terms recommended that he be appointed at a fixed salary of £70, with a war bonus of £15 for two years. This was adopted.

Hospital Saturday Fund.

AT an extraordinary meeting of the board of delegates of the Hospital Saturday Fund, over which Sir T. Vezey Strong presided, it was reported that the following grants had been made during the past year:—

	£	s.	d.
37 General hospitals	14,217	0	0
21 Cottage hospitals	681	0	0
77 Special hospitals	11,354	0	0
33 Dispensaries	386	0	0
19 Convalescent homes	1,615	0	0
25 Nursing institutions	464	0	0
11 Miscellaneous (including ambulance, distribution, and surgical appliance committees)	6,323	17	11
Total	£35,040	17	11

Mr. J. H. Dilley, hon. secretary of the Distribution Committee to the board of delegates, said that the collection for 1915 amounted to £36,796. This was almost a record collection, reaching within £150 of that for 1911, when the highest collection was made. It was most gratifying that such should be the case when the many disturbing influences and the calls upon the generosity of the public for other purposes were taken into consideration. Owing to many hospital wards being reserved for, or filled by, sick or wounded soldiers who had suffered for King and country, still greater efforts were required by those at home to help the hospitals in their endeavour to provide treatment for the sufferers, and to show them that those at home appreciated their services.

Grants amounting to no less than £35,000 had been assessed, an increase of £7,000 on the sum awarded the previous year, and of £1,000 on that awarded in 1911. The sum of £35,000 included £3,350 awarded as a war bonus to those hospitals which had been succouring our sick and wounded soldiers.

The differences in the awards were brought about by the varying expenditure of the institutions and the amount of money available for distribution.

Thirty-seven general hospitals absorbed £14,217, an increase of £5,745 on the sum granted in 1914. This was mainly owing to the war bonus. The number of wounded soldiers treated in the latter part of 1914 was 11,079, and the Government paid to nine hospitals the sum of £15,058 for the accommodation provided. The average cost of each bed per week in the general hospitals on the list last year was £1 16s. 8d. This year the cost had increased to £1 17s. 9d., an increase of 1s. 1d. per week. The out-patients attending these hospitals numbered 1,045,015 in 1915, against 1,114,457 in 1914, a decrease of 69,442 (largely owing to the National Insurance Act and the number of men in the services).

The amount allotted to the special hospitals was £11,354, as against £9,943 in 1914.

The report was unanimously adopted, and Sir Vezey Strong, in commenting upon its admirable character, said that while at the very beginning of the war people were perhaps inclined to cut down their subscriptions to hospitals and similar institutions, he believed they were now giving away more than they ever did before. They regarded it as the best way of doing their "bit," and the best appreciation they could give of the heroic work which was being done for us at home by our gallant soldiers at the front. To an inquiry as to whether the admission of soldiers in the general hospitals had interfered with the work being done for the general public, a reply was given in the negative. The chairman added that the boards of the hospitals had shown willingness, even eagerness, to receive to the utmost of their powers every suitable case which presented itself for hospital assistance.

New V.A.D. Rules.

THE latest development in the scheme for the employment of women in the military hospitals has given official recognition to the advantages of the trained over the comparatively untrained in the grading of pay. The terms of service have also been altered, twelve months being the minimum instead of the six months originally stipulated for after a month's probation.

The demand for trained women is the most important part of the scheme as it now stands. Even the assistant cooks must have some training. While those applying for posts as clerks need not know shorthand and typewriting, they must have some business training. They must be able to deal with the daily abstracts of food sent down from the different wards.

The requisitions from the War Office are not at present very heavy, but this may change at any moment. Already there are over 2,000 V.A.D. members employed on "general service," and a large number are waiting the call. The greatest difficulty is in finding suitable dispensers.

Bradford's Declining Birth-rate.

AT the annual meeting of the Bradford Chamber of Commerce, held on February 1st, Mr. J. H. Robinson, president, stated that it was rather strange that simultaneously with the increase of educational facilities there should be a serious diminution of the birth-rate. Comparing 1871 with 1891, 20 years after the passing of the Education Act, the birth-rate in Bradford had fallen 24 per cent., and from 1891 to 1911 there had been a further decrease of 34 per cent. The decline in the country had not been so marked, he was happy to say, the decrease in the first 20 years being something like 10½ per cent. for the whole of the country, and for the latter 20 years 22½ per cent. Bradford, therefore, appeared in a very unfavourable light, and the matter was serious, as it meant a shortage of employees. There was much talk about what people would do after the war, but he thought there would be plenty of work for everybody. That question of the decline in the birth-rate was, in his opinion, of sufficient importance to command special investigations; there had been Royal Commissions appointed to deal with less vital problems.

Saffron Walden Isolation Hospital Superintendent.

AT a meeting of the Saffron Walden Joint Hospital Board on January 19th, the Clerk read some correspondence which had passed since the last meeting with the Local Government Board as to the appointment of a Medical Superintendent of the Isolation Hospital. On November 15th the Local Government Board wrote stating that they understood that the Saffron Walden Joint Hospital Board had recently had under consideration the question of the appointment of a Medical Superintendent, and that it had decided to take no action at the present time. In that connection the Local Government Board must remind the Joint Board of the correspondence on this subject when the loan for the new buildings was granted, and they asked to be furnished with the Joint Board's observations upon it. In reply to that letter the Clerk wrote stating that he had submitted their letter to the Chairman of the Joint Board, who had instructed him to reply thereto stating that the Joint Board felt that, having regard to the circular issued by the Local Government Board on the necessity for economy in public expenditure, and that every effort should be made to reduce the local rates,

it was incompetent to proceed with the creation of a fresh office at the present time, and that the duties could be adequately discharged by the local medical men in charge of the cases sent to the hospital. The new buildings had cost £3,000, which expenditure would probably not have been sanctioned under present circumstances, and £390 had also been spent on a joint small-pox hospital for North Essex; and the Joint Board regarded the present time as most inopportune to add to its financial responsibility. If the same conditions were now existing as at the time the loan was granted, the Joint Board would not have hesitated to carry out the proposal. In reply to that letter, the Local Government Board wrote stating that it was very desirable that some officer should be responsible for the medical superintendence of the hospital, but under the present circumstances they would not press the matter further, but would expect the Joint Board to carry out its undertaking as soon as circumstances permitted.

Measles Epidemic at Crewe.

Dr. A. B. M'Master, Medical Officer for Crewe, in a report to the Health Committee, says measles in the borough has been of a particularly virulent type. One hundred and thirteen cases were notified from the schools, and during the three months just ended 29 deaths were due to the disease.

Consulting Surgeons at Leeds Workhouse.

The Leeds Board of Guardians propose, subject to the sanction of the Local Government Board, to appoint consulting surgeons at the Beckett Street Workhouse. If the proposal is carried out, the Guardians will be able to call upon the services of the most skilled consultants, paying, of course, the consutants' fees, for any inmates of the workhouse infirmary, and the Medical Superintendent of the infirmary will decide not only in cases of general surgical operations, but in those of throat, eye, nose, and ear affections, and in difficult midwifery cases, whether one of the specialists whom the Board will nominate shall be summoned. A new operating theatre has recently been constructed at the infirmary, and an X-ray apparatus is to be installed there.

Birmingham University.

There was a decrease of 246 students at Birmingham University last session, compared with the previous session, the total number of registered students during the past year being 786. At present 65 members of the staff and 255 students are serving in His Majesty's forces or in hospitals. In addition five past members and 223 past students are taking part in military service.

A Hospital Doctor's Liability.

A case of interest to medical men was heard at Woolwich County Court on 26th January, before his Honour Deputy-Judge Lush.

Herbert Barnett, dispenser, of Red Lion Lane, Woolwich, sued Captain Valentine Goode Johnson, commanding the R.A.M.C. at the Royal Herbert Hospital, for £5, being £2 2s. for one week's wages in lieu of notice, and £2 18s. for expenses incurred by the non-return of plaintiff's original testimonials.

Plaintiff said he was discharged from the Royal Herbert Hospital on the day before Christmas at a moment's notice. He was employed in the hospital dispensary, and sued Captain Johnson as chief officer at the hospital.

Captain Johnson said he was in no way responsible in this matter. The dispensers were civil employees under the War Office, and were under contract rates fixed by the Secretary of State for War. Presumably the real employer was the Secretary of State for War, but the officers in charge of the hospitals all over the country had powers delegated to them to engage these men. Witness was not the officer in charge of the Royal Herbert Hospital; he was the officer commanding the R.A.M.C. Company there, and, as far as he knew, had nothing to do with this matter.

His Honour said this was clearly a Government matter, and it was quite clear that Captain Johnson had nothing whatever to do with it. Plaintiff would therefore be non-suited, and Captain Johnson was entitled to costs.

Captain Johnson said he had incurred no costs other than travelling expenses, and he did not wish to trouble about these.

Harrogate Infirmary.

The annual meeting of the Harrogate Infirmary Governors and subscribers was held on January 29th. The Committee in their report stated that during the year 200 patients had been received in the ward opened for invalid soldiers, and that the work had been highly appreciated by the military authorities. Since last year further contributions had been received which, with the sum paid by the War Office, amounted to £775. The cost of maintenance of the soldiers and other expenditure to December 31st, 1915, was £560, leaving a balance of £215 towards the expenses of the current year. The general revenue account, which showed a debit in 1914 of £2,486, had been increased by the sum of £409. The deficiency on the revenue account of 1915 now stood at £2,896.

Health and War.

The first meeting of an important International Commission was held in Paris on February 2nd. The Commission represents an endeavour on the part of the Allies to systematise and co-ordinate their joint efforts in regard to the sanitary and hygienic problems raised by the war.

The Chairman is Dr. Santo Liquido, a member of the Italian Parliament, well known as an authority on questions affecting public health.

Royal College of Surgeons of England.

To-day (Wednesday) at 5 p.m., Professor J. Ernest Frazer, F.R.C.S., will deliver the second Hunterian Lecture on "The Development of the Structures Associated with the Roof of the Early Mouth Cavity," and on Friday next, February 11th, Professor W. Blair Bell, B.S., M.D., M.R.C.S., will deliver the third, on "Experimental Operations on the Pituitary Body," at the same hour.

A course of lectures on the "Anatomy of the Human Body" will also be given for first-aid and ambulance students, by Professor Arthur Keith, at 5.30 p.m. on the following dates:—On every Monday, Wednesday and Friday, from the 14th to the 25th, and the same days in March, from the 13th to the 31st.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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Original Articles or Letters intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer not necessarily for publication, but as evidence of identity.

A FELLOW FEELING.

AN officer of the Royal Flying Corps while at home on leave from the front was invited to join a party for a couple of days' shooting in the country. "Oh, no, no, thanks," he replied with emphasis. "I've not the heart for it. I've been the blooming bird myself."—*Liverpool Post.*

NOVEL (Wigtown).—The University Court of St. Andrews states that in comparison with last year the total number of students matriculated for the Martinmas term showed a decrease from 416 to 350, the number of men students a decrease from 232 to 144, and the number of women students an increase from 184 to 206.

X. Y. (Torquay).—The annual report of Plymouth Royal Eye Infirmary states that during the year 1915, 2,319 new patients had applied for treatment.

LAUNDRIES AND THE WAR.

"WE are eight million double collars short every week," said a man in the laundry trade, giving evidence at Clerkenwell County Court, and lamenting that no business had suffered through the war like laundries.

ALLOTMENT (Exeter).—We hope to publish an account of the meeting.

ELECTRIC (Gateshead).—It is stated that in the last three months of 1915, 1,134 claims against the London County Council in respect of tramway accidents were settled at a cost of a little over £10,000. In 14 out of 35 other cases verdicts were given against the Council, and these cost £634 15s.

JUST HEARD OF THE WAR.

SPEAKING at Eastbourne, the Rev. E. T. Greenshield, a missionary, said his parishioners in Baffinland, North-West Canada, had only just heard there is a war on.

IXION (Camberwell, S.E.).—The births registered in London for the week ending Jan. 29th numbered 2,028, and the deaths 1,203.

"VIVE L'ENTENTE!"

MAIDSERVANT (at the back door): "If you know wot we 'ave, why carn't you leave it on the winderledge, same's the milk does?"

BAKERESS (taking over soldier brother's round): "My brother said as you always come to the door here."

MAIDSERVANT: "Ho! did 'e——. Well, it's a case of 'hotres toms hotres mewers'—as our gallant Hallies says!"—*The Bystander.*

ESSEX DOCTORS AND THE WAR.

AT a meeting of the Essex Insurance Committee on January 25th, it was reported that two more panel doctors were joining the R.A.M.C., making a total of 60 practitioners absent from the county on military duties.

TROMMER MALT AND OTHER PRODUCTS.

IN reply to recent enquiries, Messrs. Francis Newbury and Sons, Ltd. (who are sole distributers of the products of the Trommer Co., Ltd.), inform us that these are, without exception, of British manufacture, and that none of the company's shares are, or have at any time been held by alien enemies.

Meetings of the Societies, Lectures, &c.

TUESDAY, FEBRUARY 15TH.

ROYAL SOCIETY OF MEDICINE (1, Wimpole Street, W.).—5 p.m.: General Meeting of Fellows. Ballot for the Election of Candidates to the Fellowship.

ROYAL SOCIETY OF MEDICINE (SECTION OF MEDICINE; AND THERAPEUTICS AND PHARMACOLOGY) (Joint Meeting) (1, Wimpole Street, W.).—5 p.m.: Dr. Hale White (President of the Section of Therapeutics and Pharmacology) in the Chair. A special discussion on "Trench Nephritis" will be opened by Dr. Langdon Brown, Sir William Osler, Sir Wilmot Herringham, Mr. Mackenzie Wallis, Dr. Galloway, Dr. R. G. Abercrombie, Dr. R. A. Chisolm, Dr. W. Mair will speak. N.B.—Members of other Sections interested in the subject are specially invited to be present.

WEDNESDAY, FEBRUARY 16TH.

HUNTERIAN SOCIETY (1, Wimpole Street, W.).—9 p.m.: Annual Oration. Dr. A. S. Currie: The Spirit and Inspiration of William and John Hunter.

ROYAL SOCIETY OF ARTS (John Street, Adelphi, W.C.).—4.30 p.m.: Paper. Prof. J. A. Fleming: The Organisation of Scientific Research.

ROYAL SOCIETY OF MEDICINE (SECTION OF THE HISTORY OF MEDICINE) (1, Wimpole Street, W.).—Papers. Mr. C. E. Wallis: Marat. Mr. Percy Dunn: An Oculist of XVI. Century (Andreas Laurentius). Dr. Dan McKenzie: Folk Cures by Constriction and Rings, with a discussion into the Nature of the Soul. Dr. C. G. Cumston (Geneva): Portrait of Paracelsus.

Vacancies.

The Princess Club Hospital for Wounded (80 beds), 106, Jamaica Road, Bermondsey, S.E.—Resident Medical Officer. Salary £150 per annum and all found. Applications to Mr. F. L. Provis, 51, Welbeck Street, W.

West Bromwich and District Hospital.—Assistant House Surgeon. Salary £120 per annum, with residence, board, and laundry. Applications to Thos. Foley Bache, Esq., Churchill House, West Bromwich. Frank I. Hancock, Secretary.

Leeds Public Dispensary.—Lady Resident Medical Officer. Salary £130 per annum, with board, residence, and laundry. Applications to the Secretary of the Faculty, Public Dispensary, North Street, Leeds.

Royal Albert Hospital, Devonport.—House Surgeon. Salary £150 per annum, with board and laundry. Applications to the Chairman of the Selection Committee.

Liscard, Wallasey, Victoria Central Hospital.—House Surgeon. Salary £160 per annum, all found. Applications to the Secretary.

Birkenhead Borough Hospital.—Junior House Surgeon. Salary £170 per annum, with board and laundry. Applications to the Secretary.

Bury Infirmary.—Senior House Surgeon. Salary £250 per annum, with board, residence, and washing. Applications to Hon. Sec., Infirmary, Bury, Lancs.

Birmingham and Midland Eye Hospital, Church Street, Birmingham.—House Surgeon. Salary £200 per annum, with residence and board. Applications to J. W. Pearce, General Supt. and Secretary.

Appointments.

COUPLAND, W. H., L.R.C.P. and S.Edin., L.F.P.S.Glas., has been appointed Medical Superintendent at the Royal Albert Institution, Lancaster.

FRASER, C. L., F.R.C.P. and S.Edin., D.P.H., has been appointed Temporary Medical Officer of Health for Berwick Borough.

SALMON, Arthur Guy, M.D., B.S.Lond., L.R.C.P., M.R.C.S., L.S.A., has been appointed Temporary Medical Officer for the Workhouse, and No. 2 District, by the Bodmin (Cornwall) Board of Guardians.

VERHEIDEN, M. H. (Mrs.), L.D.S.Edin., has been appointed Dentist to the Scattered Homes by the Brentford Board of Guardians.

Births.

ANDREWS.—On Feb. 2nd, at Corran, Lochgilphead, Argyll, the wife of Dr. Alford Andrews, of a son.

BARNES.—On Feb. 3rd, at 47, Gloucester Place, Portman Square, W., the wife Herbert Cooper Barnes, M.D., of a daughter.

EWART.—On Feb. 4th, at 53, The Manor House, Marylebone Road, the wife of Capt. G. A. Ewart, R.A.M.C.T., of a son.

GORDON.—On Jan. 29th, at Stanway, S. Farnborough, Effield, wife of A. Bruce Gordon, F.R.C.S.E., Temp. Lieut. R.A.M.C., of a daughter.

HILL.—On Jan. 31st, at Greenhayes, Banstead, Surrey, the residence of her parents, Mr. and Mrs. Howard Trollope, the wife of Capt. F. T. Hill, R.A.M.C., British Expeditionary Force, of a daughter.

Marriages.

BROWNING—ASHLEY SMITH.—On Feb. 3rd, at St. George's, Hart Street, London, Harold Gordon Browning, M.B., B.Ch., of Pershore, Worcestershire to Violet, elder adopted daughter of Dr. and Mrs. Ashley Smith, Codsall, Staffordshire.

JEFFRIES—BAILEY.—On Feb. 1st, at St. Mary's and All Saints, Trentham, Hugh Stephen Jeffries, Surgeon, R.N., youngest son of Mr. and Mrs. E. F. Jeffries, Market Harborough, to Jessie, eldest daughter of Mr. and Mrs. J. C. Bailey, Trentham, Staffordshire.

MCGILLYCUDDY—LUKEY.—On Feb. 3rd, at St. Cuthbert s, Wells, Lieut. Richard Hugh McGillycuddy, R.A.M.C., younger son of The McGillycuddy of the Reeks and The Madam McGillycuddy, of Bauncluve, Beaufort, co. Kerry, Ireland, to Ethel Florence, second daughter of the late Edward Lukey, Esq., J.P., of Dover, and Mrs. Lukey.

PRINGLE—HART.—On Jan. 24th, at St. Matthew's, Ipswich, Arthur Young Pringle, M.R.C.S.Eng., L.R.C.P.Lond., of Glaslyn, Crescent Road, Ipswich, to Jessie Eva Hart, M.B., B.S.Lond., youngest daughter of the late S. J. Hart, of Chatham.

Deaths.

BELEMORE.—On Feb. 4th, at Brighton, A. J. Belemore, Surgeon-Lieutenant-Colonel (retired), in his 77th year.

BOYD.—On Feb. 1st, at 134, Harley Street, W., Lt.-Col. Stanley Boyd, R.A.M.C.T., F.R.C.S., aged 59.

BRIGHT.—On Feb. 3rd, Dr. James Albert Bright, of Bedford Villa, 14, Penge Road, South Norwood, S.E., late of Glastonbury, Somerset, aged 76.

CARNT.—On Feb. 4th, Coombe Leigh, Queen's Road, Ryde, I.W., Walter George Carnt, late General Superintendent and Secretary of the Manchester Royal Infirmary, aged 55.

GARROD.—Killed by shell, in France, on Jan. 25th, Alfred Noel Garrod, M.R.C.S., Lieut., R.A.M.C., 100th Field Ambulance, eldest son of Archibald E. Garrod, M.D., F.R.S., Colonel, A.M.S., and Mrs. Garrod, of 9, Chandos Street, W., and Wilford Lodge, Melton, Suffolk, aged 28.

KIRKWOOD.—On Jan. 30th, at 1, North Street, Peterborough, George Kirkwood, M.D., aged 63 years.

MILLER.—On Feb. 4th, at Alum Chine Towers, Bournemouth, Frederick Richard, R.A.M.C.T., D.A.D., M.S., of the 60th Division, 3rd Army, son of the late T. Lanfear Miller, late of Cape Town, aged 50 years.

MONCKTON.—On Feb. 4th, at East Sheen, William Monckton, M.R.C.S., L.R.C.P., late of Portishead, Somerset, and Rugeley, Staffordshire.

WRIGHT.—On Jan. 31st, at Haddenham, Fredk. William Wright, M.R.C.S.England, L.S.A.Lond., late of Derby, aged 75.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

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AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravants les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

Age and Efficiency.

THE Public Health Committee of the New York Academy of Medicine recently included an inquiry into age and efficiency. Its findings are in agreement with other less authoritative investigators, who have believed that it is during the fifth decade that man is in his intellectual prime. Dr. Levinski-Corwin, the secretary of the committee, in a brief advance report, severely criticises the attitude of those pushful American business houses which have acted on the maxim that a man is "too old at forty." If we bear in mind the obvious fact that this is essentially an individual matter, it may certainly serve some useful purpose to endeavour to reach a generalisation, but it should also be recognised that climatic and racial considerations will so seriously vitiate conclusions drawn from American data as to render them practically valueless in Europe. In such matters it is impossible, even if we limit our survey to Europe, to say that what is true of the Latin races is equally true of the Scandinavian.

Age in the Cabinet

THERE has recently been a good deal of rambling chatter in the lay Press which, if it signify anything beyond ignorant discontent in search of a scapegoat, must mean that those who are responsible for the management of our affairs, whether at home or abroad, are effete senilities who ought at once to be replaced by younger men. There may be individual instances where this is true, but as a generalisation it is absurd. Of the members of the Cabinet, for example, one only, Lord Lansdowne, has reached seventy. Then comes Mr. Balfour with sixty-eight, followed by Lord Kitchener and Mr. Birrell, each with sixty-six, and the Prime Minister with sixty-four. Of the remainder, three—Sir F. E. Smith, Mr. Herbert Samuel, and Mr. Runciman—are forty-six or under; and the eldest of the other twelve is Mr. Bonar Law, who is fifty-eight. To suggest, as is occasionally done, that a body thus composed must be incompetent on account of the senility of its members is pure factious nonsense. If incompetent it be, the cause of the incompetence must be sought elsewhere. Both Lord Palmerston and Mr. Gladstone proved themselves exceedingly vigorous and resourceful when they were much older than the oldest member of the present Cabinet.

Periodical Medical Examination.

THE above-mentioned New York Committee has started a movement whose object is the preservation of efficiency considerably beyond fifty by detecting vicious tendencies and malfunction in the early remedial stages. This is to be done by periodical thorough physical examination. "Life insurance companies are taking up the agitation as a paying proposition, because it will retard the average death-rate. An effort is being made to equip an organisation for free examination at least once a year of anybody who cares to apply. The increased working power possible of development by this scheme, it is said, will repay a thousandfold the money which the municipality or life insurance companies may decide to put into the proposition." The idea is by no means devoid of merit. But how the neurotics would enjoy themselves!

Pre-natal Conditions.

DR. LEVINSKI-CORWIN is strongly in favour of cultivating efficiency from the very beginning—that is, from the pre-natal period. The movement in this direction, which was started some years ago, has naturally received a tremendous impetus from the conditions created by the war. Sir James Crichton-Browne, who has made the subject his own, has recently delivered a lecture characterised by his usual vigorous common sense, clothed in the graceful language which we have learnt to expect from him, in which he considered some of the more pressing aspects of the matter. The excess of females over males he regards as one of the most serious problems which the immediate future will have to face. The general decline in the birth-rate is in itself serious enough, but the relative decline in males—the negative masculinity, as Sir James calls it—is a matter which urgently demands the closest attention. This attention, he opines, should be concentrated on pre-natal conditions and infant mortality. The present "negative masculinity" is due, it seems, not so much to the fact that more girls are born into the world than boys, as to the much greater mortality among the male babies than among the female. "All over the country many more boys

are dying than girls. In the rural district of Westmorland, for example, 48 boys under a year old died to 21 girls. In Wiltshire the ratio was 135 boys to 78 girls."

Importance of Environment.

SUCH startling ratios as these must evidently be explicable. They cannot be due to mere chance. Of course, a great many theories have been put forward, but the most obvious one appears to have been overlooked. It is that boys, being very much more highly organised than girls, succumb much more readily to unfavourable environment. A Marechal Niel rose dies more readily than a roadside briar. That the environment of babies in the lower classes, especially in large cities, is hygienically of the most deplorable kind needs no emphasising. Nor need it be insisted upon that the decline in the maternal suckling of children, which has recently become so marked, still further deteriorates the "environment" of all babies. The unwillingness to suckle their young is due in the upper classes to selfishness; in the lower classes to the struggle for existence. In the middle classes it is due to suffragettism and other ill-balanced propaganda, which seek to persuade woman that she is something other than a child-bearing and child-rearing creature. If you would get down to the bed-rock of the decline in the birth-rate, you must study the extreme feminist movement—its theories and its practices. And Havelock Ellis might help you in your studies.

A Wood Green Oracle.

To the list of Bumbles who have been raising their ignorant voices against the L.G.B. order for the compulsory notification of measles, we must now add some of the members of the Wood Green Council. Councillor Cole is reported, in the *North Middlesex Chronicle*, to have delivered himself on this subject as follows: "It was about time that parents were allowed to keep some of their parental responsibility. The isolation of scarlet fever cases had not stopped that disease; it had simply relieved certain people of the expense of illness. This new order was a deliberate conspiracy, and would mean a cost to the national rates of millions a year. And what for? How many patients would they have in the hospital? It was a pity the Government did not get on with their war work and let the Councils alone for a time." Now, there is, on scientific grounds, a very strong case against the compulsory notification of measles, the chief of these being that the most infectious, if not the only infectious, period is past before the diagnosis can with certainty be made. We pointed out last week (p. 116) that Dr. Davies, the M.O.H. of the City of Bristol, had marshalled the arguments against compulsory notification, and had presented a reasoned and temperate report on the subject to the Health Committee. A great many M.O.H.s and practical sanitarians are in cordial agreement with Dr. Davies, and the compulsory order has received as much criticism from members of the profession as from laymen. The criticism of the profession has been considered and informed; that of the laymen has, for the most part, been ill-considered and ignorant. Dr. Davies' report affords an excellent example of the one; Councillor Cole's remarks a typical specimen of the other.

State Medical Service.

THERE can, I think, be very little doubt that we are moving rapidly towards a State Medical Service controlled by a Ministry of Public Health armed with very extensive powers. The demand for such a Ministry has been a growing one ever since the Public Health Act of 1875 made of the Medical Officer of Health the most important functionary in the community. The Insurance Act brought the profession into still more intimate touch with the Government, and the state of chaos in which the working of that Act now finds itself is evidently due to the want of some guiding and co-ordinating authority. The Medical Officers of Health cannot for much longer be allowed to remain under the control of the butchers, bakers and candlestick makers who form the majority of local councils. The important officials upon whom the health of the community so largely depends must be combined into a regular state service, responsible to the State, through the head of a State department, removable by that head and by none other. The Insurance Act will probably require several amending Acts before it can be made to work smoothly, and the details of these amending Acts can be worked out only by a Department with the necessary machinery for obtaining the necessary knowledge. It all sounds singularly Utopian, but its advent cannot be long delayed.

Over-lying.

IN the matter of the causes of infantile mortality, it would seem that one cause, namely, over-lying, is, in reality, less frequent than has hitherto been believed to be the case. This has been recently brought out by Dr. W. A. Brend, the distinguished Lecturer on Forensic Medicine at Charing Cross Hospital, in his thesis on "Deaths from Violence" which gained him the Gold Medal in State Medicine when graduating M.D. (Lond.). Dr. Brend is also a barrister-at-law. Dr. Brend says that in a large number of cases, over-lying is stated as the cause of death owing to the superficial nature of the *post-mortem* examination, as performed by the ordinary medical attendant. When the *post mortem* is performed by a skilled pathologist this cause of death is very seldom registered. In proof of this contention, he quotes the figures of inquests held in London on children under one year of age during 1910. In that year, out of 271 such inquests in the Central District, 68 were attributed to over-lying, and the same, or nearly the same ratio ruled in all the other London districts except two. These two were the Westminster and South-Western districts in which at that time Mr. Troutbeck officiated as Coroner. Mr. Troutbeck made it a rule to employ an expert pathologist in every case, and from his districts the rather startling fact emerges that out of 134 inquests on dead babies, only one death was attributed to over-lying. As Dr. Brend properly points out, a verdict of overlying is a very serious one for the mother, and should not be returned except as the

result of the fullest and most expert investigation. This is obviously another matter which ought to come within any scheme of a State Medical Service. To every Coroner's Court there should be appointed a medical officer who should be a specialist in pathological investigation.

Panel Practice and the R.A.M.C.

Another instance of the need for co-ordination of medical services to the public is supplied by the pull-devil-pull-baker relations between the military on the one hand, and, on the other, the insurance officials and the public health officials. A certain number of local sanitary authorities have already refused to allow their medical officers of health to join the R.A.M.C., and many more are likely to follow suit. So far as the Insurance Commissioners are concerned, they are already in a state of great alarm lest the present rally should result in those insured under the Act being left with no one to look after their medical needs. The position is likely to become a serious one, as it is quite evident that a *locum tenens* who has entered into no agreement with the commission cannot be coerced. And a very fair proportion of panel work is now being done by substitutes. The state of mind of the Insurance Commission may be gauged by the tone of a letter addressed to the Worcestershire Committee by Sir Robert Morant in reply to a question.

An Unworthy Suggestion.

Sir Robert Morant wrote: "There was at present an ample supply of doctors to attend to the civil population, but they were unequally distributed. He suggested that before giving consent to any doctor's absence, the committee should satisfy themselves that the remaining doctors would be in a position to meet the demands of the civil population. An assurance of this nature was necessary in order to prevent the doctors offering overwork as an excuse for not fully discharging their obligations under their agreements. Further, any *locum tenens* should be bound to remain either till the doctor returned or the war finished; otherwise, in the event of the deputy joining the Army or leaving for another district, the committee would be placed in a difficult position." That Sir Robert's mind must have been perturbed when he wrote thus is evident from the suggestion, which is quite unworthy of him, that there is a likelihood of doctors pleading overwork as an excuse for not doing their duty. If *locum tenentes* are well advised they will resolutely refuse to bind themselves hand and foot by entering into any contract whatever with Insurance Committees.

Hinckley Again.

I see that at a meeting of the Hinckley Guardians, exception was taken to my observations (Periphery of Jan. 19th) concerning the L.G.B.'s interference to prevent Dr. Murray from obtaining the appointment of M.O.H. because he was of military age. The Hinckley Guardians had a perfect right to appoint anyone whom they thought fit. My criticism was directed, not against them, but against the officials of the L.G.B. who succeeded in "rushing" a matter with which they had no concern. At the last meeting of the Guardians the Rev. A. E. D. Disney is reported to have said that "he disputed the right of one doctor to sell his practice to another on the promise that the medical officership would go with it." That is exactly the sort of muddle-headed comment, unctuously delivered, which is to be expected from the local parson. Neither I, nor so far as I know anyone else has ever claimed for a purchaser the right to promise his appointments to his successor. There can be no such right, and any purchaser who allowed himself to be beguiled by such a promise would be a singularly confiding fool. What I protested against was the intervention of the L.G.B. to smother such claims as the purchaser in this case might, on his merits, have been in a position to urge.

A Worthy Charity.

Miss Whitehead, of 6b, Winchester Road, Hampstead, N.W., is engaged in a very practical charity which makes a special appeal to medical men. News travels slowly to the Hebrides, and publicity is difficult. When war broke out, the fact was announced from the pulpits, and the men immediately rose and left for the mainland. These people are fisher-folk; men, women and girls earn a precarious living from the sea. The men are now employed by the Government as mine sweepers, or what not. The women have their separation allowances; but the poor fisher girls have nothing. Fortunately they can all knit, and they knit socks and stockings of good greasy peat-smelling Shetland wool, which reminds you of Harris tweeds. Miss Whitehead buys these socks and stockings, and pays for them, and she is glad to dispose of them to anyone who wants to send such things to officers or men in the trenches.

Good Value.

Miss Whitehead sent me some samples of the work of these fisher girls, and I showed them to an officer home on leave. He was much impressed with them and asked their prices. When I told him that the socks cost 2s. 6d. and the stockings 3s. 6d., he exclaimed that he wished he had seen them on the previous day, for only that morning he had bought several pairs of stockings which were much inferior to these, for which he had paid 6s. 6d. a pair. Being a Scotsman, he felt very much aggrieved that the fates had thus baulked him of a bargain. Medical men very often have an opportunity of recommending articles of clothing for the front, and in connection with the prevention of trench foot they would do well to think of Miss Whitehead and her excellent charity. I understand that Miss Whitehead, of 6b, Winchester Road, has no connection with the Nurse Whitehead who advertises in the Times concerning another charity in which socks have a place.

A Popular Appointment.

It is by no means invariably the case that medical appointments to the Royal Household meet with the unqualified approval of the profession. As a rule, indeed, the comments on these appointments are more frequently

unfavourable than favourable. It is therefore pleasant to be able to record one such against which not a single voice is likely to be raised. Mr. Harold Low, who has recently been appointed anæsthetist to His Majesty's household, is an M.A., M.B., B.C., of Cambridge. He was formerly in general practice in South Kensington, but has for some time past devoted his attention exlusively to anæsthetics and is at present Senior Anæsthetist and Lecturer on Anæsthetics at St. Thomas's Hospital. On grounds neither personal nor professional would it have been possible to make a better selection.

Sir Robert Philip.

Sir Robert Philip, who has been moved by some comments in these columns to write a short article which appears in the present issue, is probably the greatest living authority on the subject of which he treats. His views, like those of all pioneers, were at first regarded with deep distrust by the older members of his profession, but although well on the right side of sixty he has lived to see the principles for which he fought become firmly established in all civilised countries. His co-ordinated scheme for fighting tuberculosis has been adopted as a national system. He is the Senior Lecturer on Clinical Medicine in the University of Edinburgh, and Senior Physician to the Royal Infirmary.

Sinapis.

CURRENT TOPICS.

The Highlands and Islands.

The Medical Service board of the above has issued its regulations as to medical services at modified fees. We have the same kind of feeling for the term "modified fees" as Lord Rosebery had for "moral victories": it sounds well to the ear and looks indifferently well on paper, but it leaves a bad taste in the mouth, all the same.

The Board has agreed with the practitioners that medical attendance at modified fees shall be made available to the families and dependants of insured persons, uninsured persons of the cottar and crofter classes and their families and dependants, and others in like circumstances to whom the payment of the practitioners' ordinary fee for medical attendance would be an undue burden. The fees chargeable are—not exceeding 5s. for the first visit and 2s 6d. for each subsequent visit in the same illness; midwifery fees (including fees for any subsequent visits that may be necessary) £1. The fees will be the same whatever be the distance of the patient from the doctor's place of residence. What is now the price of horse-flesh, petrol and other things? In the event of any dispute as to whether any patient comes within the scope of the arrangements between the board and the practitioners, the matter shall be decided by the Board. On the face of it the whole thing looks like an abominable piece of sweating. However, as the agreement appears to have been arrived at, it is to be supposed that the doctors are satisfied. They should know their own business better than we do. Yet we venture to think that it would be very advantageous for any medical man who wishes to practise in that part of Scotland to see to it that he is born a Highlander with a peat-reeky name. Also he should be prepared to live on porridge and do without breeks.

Security of Tenure for Health Officers.

At last this much needed condition in the appointment of Health Officers has been obtained. The Local Government Board has now prepared an Order giving them security of tenure. Mr. Long wisely thinks it would be inadvisable to issue the Order at the present time for the reason that so many of the men to whom it applies have temporarily relinquished their posts to serve with the forces. Obviously it would be unfair to these patriotic officers if, while they are absent in the service of their country, substitutes were given permanent appointments. It would also be unfair to medical officers on military duties, if posts which became vacant through the death or resignation of the present holders are permanently filled, when men, who in ordinary circumstances might apply for the posts, are precluded from doing so because they are soldiers for the time being. Sir Philip Magnus, who is the Parliamentary champion of the medical officers in this matter, is in agreement with the President of the Local Government Board, with regard to the advisability of postponing the issue of the order until after the war. This is a much needed reform which is long overdue.

Free Medical Assistance for Edinburgh Poor.

We note that at the 139th meeting in connection with the Royal Public Dispensary of Edinburgh, held on Saturday, a very satisfactory report of the last year's proceedings was laid before the meeting. Less work was done; first, because of the Insurance Act, fewer men applied for relief; and secondly, the medical staff had been reduced by the War's demands from eight to two. It was left to Drs. Cattanach and Darling, with the aid of willing medical students, to carry on the work. This kind of thing is going on all over Scotland. Our ranks are being depleted on behalf of the Army and Navy. Credit to the men who go to the front! What about those who perforce—or even otherwise—stay at home? Exempli gratia: within the sound of the Bells of Trongate lived a practitioner last year whose three medical confreres went out to France, leaving their panels to his honest care. For a month he did their work and his own. But it was too much for him. So he enlisted for a rest. Didn't the late Phil May picture a lion-tamer in the lion's cage, calmly resting while his nagging, angry wife, on what is popularly supposed to be the safe side of the cage, adjures him to "Come out, you coward!"? The analogy is there if you will look for it.

Judges and Justice.

Sitting last week at the West London County Court, during the hearing of a case under the Workmen's Compensation Act, Judge Sir William Selfe is reported to have said: "The matter could easily have been settled for a few pounds, yet we have a medical referee brought here as well as

counsel and several medical men on both sides. It's positively disgraceful."

We do not know the particular circumstances of the case in question, but we have known the learned judge to express similar views in cases where the employer or his representative contended that the workman had recovered from the effects of an accident, and was fit to return to work. It is very often cheaper in such a case to give the workman a few pounds, and pay his solicitor's costs, to avoid proceedings in a County Court, inasmuch as the employer, even if successful in litigation, can hardly expect to recover his costs from the workman. It is obvious, however, and this is in accordance with experience, that if it is to become a custom to hand over moneys to workmen whom the employers' medical advisers consider fit for work, such procedure quickly degenerates into a process of submission to blackmail. Sir William Selfe is naturally anxious to expedite the work of his court, but he should not forget that the courts exist for the purpose of doing justice between litigants. For this the judge is paid. No employer, in view of experience since 1906, is anxious for litigation under the Workmen's Compensation Act. If an employer is a party to such proceedings, the judge ought to know that there is good reason for the step. To resist one unjust claim may save many similar claims against the same employer or Insurance Company. In such a case it is money well spent, and it is no part of the duties of Sir William Selfe, as a minister of justice, to characterise as "positively disgraceful" proceedings, which he must know are in all probability taken after deliberate consideration by responsible parties.

Eusol.

It would seem that the return to antiseptics caused by the exigencies of military surgery may lead to important advances in our knowledge. We published some weeks ago a preliminary report on the use of urea as an antiseptic, and now we draw attention to hypochlorous acid, which has been the subject of recent investigations by a special committee at Edinburgh. The committee is greatly impressed by the efficiency of eusol, as it is called, as an antiseptic. The cases quoted show a very rapid cleansing even of the most septic wounds. Moreover, in the practice of the surgical outpatient department of the Royal Infirmary, it was found that where eusol was used as a primary dressing 86 per cent. of recent wounds remained aseptic. The strong claim is made that eusol, while efficient, is non-toxic and non-irritating. It is said that, while it is highly destructive to bacteria, it is non-toxic to the tissues. If this be true, we have to do with a drug unique in its properties, as far as our present knowledge goes. At any rate, there can be no doubt that eusol is a useful antiseptic, and it has the great advantage of being inexpensive.

Registration of Nurses.

For many years past there has been, as our readers know, a strong agitation among nurses to secure State registration. The official nursing organisations are in favour of registration, but certain of the larger metropolitan hospitals seem to think that their interests are threatened by the proposal, and so far the agitation has not had complete success. A Nurses' Registration Bill has passed the House of Lords on one or two occasions, but up to the present has not become law. Since the beginning of the war nurses have found themselves too busy to spend their time in political activities, and the demand for State registration has been allowed to stand over. Unfortunately, as the *British Journal of Nursing* last week points out, the interests of nurses are now threatened by the proposed establishment of a voluntary scheme of some sort which may "dish" registration. It appears that the Joint Law Committee of the British Red Cross and the St. John Ambulance Societies has taken the matter in hand, and proposes to establish a College of Nursing, one of the functions of which is to grant a certificate of proficiency in nursing. The scheme seems to be sufficiently foolish to condemn itself, but the nurses do well to be on their guard. It is largely owing to the powerful social influence of persons connected with the two societies mentioned that nurses have been deprived of their proper prerogative in attending to our sick and wounded soldiers, and their duties committed to unskilled hands. A committee which cannot distinguish between a nurse with three or four years' training and a voluntary worker with three or four weeks' is certainly not a body to be entrusted with any control over the education of nurses.

After the War.

We are at present too blinded with the dust of the Titanic conflict to form any just estimate of what lies beyond. The perspective of the human mind is shaken and out of focus; Europe, nay even the world is once again cast into the melting pot. But one thing is certain—that this war is truly a struggle between the Light and the Shadow typified. Upon the one side is the spirit of quest, progress, imagination, spirituality—what you will. Upon the other is that heavy burden, almost inseparable from humanity—System—perhaps beneficent, but also when hypertrophied—a tyrant. The great accepted platitudes of civilisation are in question, Efficiency, Empire, Nationhood, and Wealth. At the conclusion of the struggle all exhausted humanity will clamour for a new scale of values, individualism will be rampant, combated by Socialism, which in itself has recently shown a tendency to systematise also, in an evil and tyrannous sense. The mere clash of physical armies may come to be regarded as less terrible than the uproar of a million human souls searching for reality and a new positive ideal. But out of all, it is our confident hope, will emerge a new era, one step nearer to the realisation of mankind.

PERSONAL.

The King has appointed Dr. Harold Low to be Anæsthetist to His Majesty's household.

Dr. P. F. Macgregor, M.D., Cambridge Park, Wanstead, has been elected Medical Officer of Health for the Wanstead district.

Capt. J. Ewing, late Captain in the 1st West Riding Field Ambulance and Temporary Captain in the Royal Army Medical Corps, is gazetted Captain and a Deputy Assistant Director of Medical Services.

The Council of the University of Sheffield have appointed Dr. Arthur J. Hall, M.D., F.R.C.P. (Senior Physician, Sheffield Royal Hospital), to the Professorship of Medicine, in succession to Dr. Duncan Burgess.

FRENCH CLINICAL LECTURE

ON

TYPHOID FEVER AND ANTI-TYPHOID VACCINATION.

By L. RIMBAUD,

Medecin aide-major of First Class, Professor at the Faculty of Medicine of Montpellier

[SPECIALLY REPORTED FOR THIS JOURNAL.]

TYPHOID fever manifested itself in the Army with a certain degree of intensity during the whole of the period which ranged from November, 1914, to the April of 1915. Having been attached throughout the whole of that period to an important hospital centre, to which typhoid cases were conveyed for treatment, we have had the opportunity of carrying out, on a very large number of patients, clinical and bacteriological observations which were found to furnish ample material for a large and fertile series of productive studies of the very important questions which arise in connection with this subject.

The circumstances have appeared to us to be quite specially favourable—not exactly for merely determining the efficacy of the prophylactic procedure of anti-typhoid vaccination, *which was already fully established and remains the best means of defence against Eberthian infection,* but —towards promotion of satisfying research; with the object of determining the limits of the protective results which we may reasonably anticipate from the universal adoption of this procedure, when a sudden and generalised outbreak of typhoid fever appears among troops on active service in the field.

And here it must surely be admitted at the outset that first appearances may prove quite deceptive. Observers who have not previously been duly warned of this fact will have every right to be surprised on seeing an outbreak of typhoid among the troops quickly present a notable range of extension among those bodies of men whom they previously had been led to believe had been effectively safeguarded by protective vaccination. In order to form a sound judgment regarding this very important question it will be absolutely necessary to lay bare the bedrock of our evidential data. This is the task which we have assigned ourselves for scientific and clinical examination on the present occasion.

In order to accomplish this object it was above all things necessary to establish a rigorous bacteriological classification of the whole series of cases which were admitted to hospital with typhoid fever, or with gastric febrile indisposition. This rigorously defined classification could be established only with the aid of the evidence afforded by hæmoculture, which is the sole method of research which enables us to distinguish true typhoid fever, the specific infection due to the presence of Eberth's bacillus, from the essentially distinct clinical entity of paratyphoid. It was against the former disease only that the vaccinated cases had been immunised.

Now, our researches soon came to demonstrate conclusively for us the clinical fact that we were unexpectedly placed in presence of a particularly numerous series of cases of paratyphoid fever—a series of which the items appeared to have assumed a proportionally more rapid and extensive development than that of the cases of typhoid fever proper, as the infective power of the latter disease became more effectively strangulated by the more regular and more widely spread employment of prophylactic vaccination. Indeed, the occurrence of paratyphoid fever has been observed by us specially among the subjects of vaccination. Accordingly the question must here be asked: Can we now definitely assert that the vaccinated have in all cases been permanently protected against the bacillus of Eberth? The answer is: No. And we must also admit our belief that some cases of true typhoid fever have actually occurred among the persons who had received the antityphoid vaccine. But the net result of our collective observations has gone to prove definitely that such cases have been of very rare occurrence—even exceptional—in spite of the very rapid extension of the disease from the very commencement of the epidemic. Besides, it should be always remembered in this connection—and we shall return to the consideration of this aspect of the question after placing before the reader the general results of our researches—that in many of the cases the injection of the vaccine matter had been carried out but irregularly and incompletely; whether it was that the physicians were not duly impressed with the crucial importance of the procedure from the beginning, or—and this was the reason of more frequent occurrence—on account of the difficulties arising from the fact that the vaccinations had to be carried out in the advanced sections of the army in the field; and, in some cases, even on the persons of the soldiers who were actually passing into the firing line, which had to be crossed during the carrying out of the series of antityphoid vaccinations.

In the hospital in which we carried out our researches, the typhoid cases were admitted by hundreds. And no cases were received but those of men who definitely presented the diagnostic features of typhoid or paratyphoid fever; or a febrile indisposition obviously dependent on some gastric source. And, in our own wards, we carry out the procedure of hæmoculture at the very onset in the case of every individual patient admitted. In the other wards, we had recourse to hæmoculture only in the cases of vaccinated subjects and in cases of difficult diagnosis. In this way we had been able to carry out 656 hæmocultures during the period ranging from December 15th, 1914, to April 30th, 1915. The bacteriological researches, and more especially the procedures of identification of the isolated germs, have been carried out in the microbiological laboratory of an army corps, under the direction of M. Russell (médecin-major de 1re Classe), who has thus taken an actively intimate part in this work of research, and to whom we gladly embrace the present opportunity of testifying our liveliest gratitude for his very valuable collaboration.

The *technique* employed was as follows:—

The procedure of hæmoculture was carried out in a medium of bile (5 to 10 cc. withdrawn through an antiseptic puncture from a vein at the bend of the elbow, added to 10 cc. of ox bile) which was placed in a stove at 37° (98.6° F.). On the following morning it was again sown on bouillon. When the hæmoculture is positive, the bouillon becomes turbid on the same evening. The culture is then unified (mobile bacilli not taking the Gram stain), and now re-inoculated on several different media:

jelly treated with glucose, or neutral red, milk coloured with turmeric, Petruschki's stain, and sugar of lead jelly. The distinctive characteristics displayed by the bacillus of Eberth and the paratyphoid bacilli A and B, respectively, when sown on those media, are indicated in the following table:—

	Bacillus of Eberth.
Jelly with glucose or neutral red.	No modification.
Jelly with sugar of lead.	Darkened.
Milk with turmeric.	Slight permanent acidification
Petruschki's stain.	Do.

Paratyphoid A.	Paratyphoid B.
No modification.	Darkened.
Slight permanent acidification.	*Caméléonage* (temporary acidification followed by alkalinity).
Do.	Do.

The identification was then completed by the agglutination of the bacillus after isolation, by means of the specific media (Eberth-serum, Para A-serum, Para B-serum).

The *technique* here indicated does not necessitate the employment of any cumbersome materials (an important practical feature in the case of a bacteriological laboratory for use in the field), and permits the preparation of a response to the inquiry of the clinical physician in charge of the case, after a relatively short interval (36 to 48 hours). *Of the series of 656 hæmocultures thus carried out, 339, or 51.6 per cent., proved to be positive.*

This relatively small percentage of positive hæmocultures depended on the fact that most of the specimens of blood employed had been withdrawn from the respective patients on the eighth to the fifteenth day; they having reached us only after being detained for an interval of observation with the ambulance, and being passed on after the diagnosis of the case had been confirmed. On the other hand, too, a certain number of hæmocultures were carried out for diagnostic purposes in cases of tuberculosis, of pneumonia, etc.

The isolated germs separated out in the following proportional order: Eberth's bacillus, 164; paratyphosus A, 121; paratyphosus B, 54. We do not propose to consider at present any results but those obtained in dealing with the vaccinated cases. The preliminaries were duly carried out in 434 cases of individuals, who had each received from one to four injections of antityphoid vaccine (*a*). The agent employed in almost all of the cases was the Vincent vaccine; three or four men belonging to the naval corps had received injections of the Chantemesse vaccine; and the Bisredka vaccine was employed in a single case only.

Of the subjects of vaccination, 203 hæmocultures, or 46.7 per cent., yielded positive results. They have presented: Bacillus of Eberth, 51; paratyphosus A, 106; paratyphosus B, 46. Such are the general results obtained by our observations. The above figure, of 51 specimens of the Eberth bacillus isolated from the blood of that number of subjects who had been actually vaccinated against typhoid fever, must appear at first sight rather impressive. But let us proceed to consider the fundamental facts.

At the outset the majority of this series of 51 vaccinated subjects had not received their full number of injections; 4 of the cases had received but one puncture each; 20 two punctures; 17 three punctures; and only 10 had had their four punctures each. The question will now be asked: How did we ascertain those alleged facts? The answer is: From the men themselves. In three-fourths of the cases there was no written entry in the note-book, and we were thus obliged, generally speaking, to content ourselves with the verbal affirmations of the patients themselves. What reliable indications did we secure in that way?

In the first place, we were able to take account of the fact that the very great majority of the men had certainly been vaccinated since the commencement of the war (men of the reserve classes and territorials). In some of the cases, the vaccination had been regularly carried out in the depots. A large number of the men had been sent on to the front before the full series of vaccinations had been completed; these had, however, been subsequently carried out in some of the cases; and thus, as a result of unavoidable circumstances, the later vaccinations had been made at irregular intervals—of three weeks or a month, or even more. Under such conditions it may well be surmised that many of the vaccinated subjects had received three or four punctures without actual augmentation of the dose of the vaccine; and that, as a necessary consequence, they had really had conferred upon them merely the mediocre degree of immunity producible by a single injection, in spite of the physical repetition of the puncture several times. And it must also here be added that the vaccinations were possibly carried out in some instances by physicians who had been incompletely trained in the method of procedure; and who did not quite comprehend the importance of the regularity of the repetition of the injections, and the progressive augmentation of the dosage, in securing the subsequent condition of immunisation.

We have already stated that our information was usually derived from the men themselves. The question must then be asked: What definite value should we attach to such information? It must be admitted that some of the patients were at the time of our interrogations in the stage of full development of typhoid fever, often of a grave character; and that, under such conditions, they might well—even without actual desire or intention to deceive—lead us to erroneous conclusions by the defective information supplied through the distorting or cloudy media of lassitude or amnesia. Others, indeed, who were even less gravely affected, were found to be unable to locate times or places in precise fashion; they could not recall the days, or even months, in which they had been punctured, and had actually forgotten the number of injections which they had received. Then a certain proportion, and that a more numerous one than one would be readily disposed to anticipate, actually responded to our queries by giving deliberately false information. The vaguely imaginary dangers of the procedure of antityphoid vaccination had also the effect of frightening a good many of the men, who consequently had recourse to every available means of avoiding it. Men of this way of thinking in some cases made a deliberate pretext of a previous vaccination which had never been carried out, in order to enable them to evade the dreaded ordeal, while others during the course of *séances* to which a large number of effective soldiers had been convoked, were able, without any very great difficulty, to escape the control of supervision, and figure as vaccinated subjects, although they had never received their puncture. In the course of the numerous vaccinations made by us, we have our-

(*a*) Those injections had all been made at the minimum interval of one month previously; and with a maximum of two months.

selves been able to establish the occurrence of various instances of deception of this variety. And, we should here add, in our cases of vaccinated typhoid patients we have been able to obtain an avowal in some instances, by pressing home the process of interrogation. One young soldier who had typhoid fever of the genuine Eberthian type had at first declared, on being questioned, that he had received four injections of the vaccine. When at the termination of his attack of typhoid fever—and when we had succeeded in obtaining his complete confidence—he revealed to us that he had really received but a single puncture. When they commenced to carry out the practice of immunising vaccination, permission to pass on was given only after receipt of four punctures by each; he had, however, managed to secure his early departure by having himself placed among those whose series of injections had been completed, although he had really received but the first dose. A soldier of a territorial infantry regiment had inscribed the regulation testimony to having received the prescribed number of four antityphoid injections. In the course of his illness (which presented all the distinctive features of paratyphoid A) he confessed to us that the statement contained in the inscription was really inaccurate; having suffered formerly from rheumatic attacks, he was afraid that the vaccination would provoke its crisis anew, and he succeeded in securing the means of escaping the procedure (*a*).

We could readily cite a number of other instances of the same kind. The reservations thus practised appear to us to be of the greatest importance in considering the subject: explaining, as they unquestionably do, at least in part, the relatively considerable proportion of cases occurring among the vaccinated of genuine typhoid fever characterised by the presence of Eberth's bacillus. In every statistical calculation, we should always take those facts into account; when neglected, they never fail to leave the stamp of error behind. The fact, however, as we are ourselves obliged to admit from the results of our personal experience, is that in the cases of at least four or five of the patients who had been represented as having received their complete doses respectively, the vaccination had actually been completely carried out in orthodox fashion, although the diagnosis of typhoid was confirmed by a positive Eberth hæmoculture. One of them, a hospital official, had been vaccinated by our own hands two months previously. And, if we are to receive as genuine the affirmations of all our patients, ten of the subjects who had received in orthodox fashion the whole series of four injections of Vincent vaccine have subsequently passed through genuine typhoid fever, characterised by the presence of Eberth's bacillus.

We have now to ask ourselves the crucial question: Is there any reason that a doubt should remain regarding the protective efficacy of this admirable method of antityphoid prophylaxis which is furnished by the procedure of preventive vaccination? The researches of Chantemesse and Widal, of Wright, and of Vincent, rest on bases too solid to demand further confirmation. Then, again, after having seen the decisive results obtained from the employment of the Vincent vaccine in Morocco and in France—in the several epidemics of Avignon, of Paimpol, of Puy-l'Eveque, of Montauban—surely no remaining doubt can continue to subsist regarding the prophylactic efficacy of the antityphoid immunisation.

Let us now, in way of final confirmation, cast a generally comprehensive glance over the record of the results obtained. Typhoid fever breaks out abruptly in an army in the field under conditions in which the disease has never been met with since the adoption of prophylactic vaccination. Of foremost importance in this connection has been, of course, our experience of the great epidemic which raged in the Belgian Army. This broke out in the month of November, after the trying days of the battle of the Yser. The troops were then physically exhausted, and a large proportion was formed by territorial regiments. The heavy tribute of the disease was found to be levied, with conspicuous selection, on the men whose ages lay between 35 and 40 years. Vaccination had not been universally resorted to in case of all the effective troops; but it was then proceeded with hastily during the full blaze of the epidemic, and approximately along the firing line. In our special hospital, which was placed in close proximity to the front, we received the patients in hundreds. We retained there only the 656 cases in which we carried out the hæmocultures. Of this total, 434 had been vaccinated; and of these 145 *only must have received their quota of four punctures;* among the cases of this series we discovered the *bacillus of Eberth in ten instances.* Accordingly we find on summarising the results after making all possible reservations, the vaccinated patients presented true typhoid fever, with the bacillus of Eberth, in only 6.8 per cent. of the total number affected. On the other hand, the non-vaccinated cases of the same epidemic, who numbered 222, furnished us with 113 *positive Eberth hæmocultures,* or 50.9 *per cent. of the series.* Then we must here ask ourselves: What therapeutic procedure, either curative or preventive, has hitherto been found to yield absolute results? Do we not meet with cases of small-pox occurring in subjects who have been regularly vaccinated and re-vaccinated; and who can seriously dare to discuss, with the aid of such data, the genuine utility of the Jennerian vaccination?

An actually unquestionable proof of the genuine efficacy of antityphoid vaccination arises, as it seems to us, from the evidence presented by the adjoining table. The statistical summary here concentrated shows at a single glance that the occurrence of genuine typhoid, with the presence of the Eberth bacillus, was rare in direct proportion to the completeness with which the procedure of prophylactic vaccination had been carried out.

	Typhoid states.	Positive Eberth Hæmoculture.	Percentage.
Non-vaccinated	222	113	50.9
Vaccinated (one injection) ...	21	4	19
Vaccinated (two injections) ...	122	20	16.3
Vaccinated (three injections)	146	17	11.6
Vaccinated (four injections) ...	145	10	6.8

We must here specially emphasise the fact that, in the absence of skilled bacteriological research, all those 434 vaccinated subjects would have been labelled cases of true typhoid. What would then have been the resulting estimate of the value of anti-Eberthian vaccination! But, in the light of our present methods of investigation, we have

(*a*) This article was passing through the press when there appeared in the columns of *La Presse Médicale* (September 30. 1915), an interesting communication from Prof. Vincent, dealing with the subject of "Falsified Vaccination." We have ourselves met with cases—even a great number—of those falsified vaccinations, and our experience in that connection has led us to complete agreement with the very appropriate observations and conclusions of the author. We must also remark here that, our attention having been drawn to the facts by M. Vincent himself, we have, in the course of our own researches, conducted all our inquiries among our vaccinated patients with the greatest possible rigour.

identified with the aid of hæmoculture 152 cases of paratyphoid fever among 434 vaccinated patients. Thus the blood-culture has demonstrated the presence of the bacillus paratyphosus in 35 per cent. of the vaccinated cases, while the non-vaccinated (to the number of 222) have displayed but 23 examples, amounting to 10.3 per cent. Accordingly, we may now well ask ourselves the question: How could we, before the arrival of an actual epidemic, have been able to suspect the importance of paratyphoid infections?

We are now able to affirm the following facts of clinical statistics: Preventive vaccination has protected us against a serious visitation of typhoid fever; cases have actually occurred among the non-vaccinated, and the irregularly vaccinated; among the vaccinated, in whose cases the procedure had been completely carried out, the occurrence of true typhoid has been extremely rare. And, inasmuch as a relatively large proportion of cases of true Eberthian infection occurred among the vaccinated who had received but two or three doses of the Vincent vaccine, this statistical fact appears to furnish a plea in favour of the necessity for the administration of the full series of four injections.

As the fact now remains that anti-Eberthian vaccination has evidently proved itself to be no defence against paratyphoid infections, it will be suggested by some that the question arises, Whether it does not really seem that they have actually facilitated the extension of the latter form of infection? To this the answer is, that: there are no grounds for the suspicion other than deceptive appearance; in the absence of anti-Eberthian vaccination, such cases would doubtlessly have passed unperceived in the crowded course of a terrible epidemic of typhoid. The features assumed at the outset by the latter were also of a peculiarly grave character; the general adoption of preventive vaccination unquestionably modified the virulence. Paratyphoid fever has continued to evolve. In a forthcoming study we hope to demonstrate the fact that its naturally benign quality renders it a malady infinitely less redoubtable than true typhoid.

ORIGINAL PAPERS.

THE CAMPAIGN AGAINST TUBERCLE.

BY SIR ROBERT W. PHILIP, M.D., F.R.C.P., F.R.S.E.

Senior Physician to the Royal Infirmary, Edinburgh; Lieutenant-Colonel, R.A.M.C.

The interesting remarks under the above heading in The Medical Press and Circular for February 2nd seem to admit of slight amplification. In the campaign against tuberculosis it is desirable to avoid placing in seeming antagonism factors which, far from being antagonistic, are mutually helpful.

The functions of the sanatorium and hospital are sufficiently definite and clear. In so far as they are well equipped and manned, they play an important part in treatment and prevention. They represent a considerable advance on the older line of treatment of tuberculosis. When cases are properly selected, they serve their purpose in a co-ordinated anti-tuberculosis scheme thoroughly well. Both institutions are adjuvant to—and must not be placed in opposition to—other measures in the campaign.

Thirty years ago it was borne in on some of us who were working at tuberculosis that the problem was a wider one than the hospitalisation of tuberculous persons and that the hope of its solution lay in the projection of the search-light into the home. The recognition of the house as the breeding-ground of tuberculosis—as of much other preventable disease—led to the creation of the Tuberculosis Dispensary. The housing question in the largest sense formed the inspiration of the Tuberculosis Dispensary. The urgency of the question has been emphasised by the facts which the Dispensary has unearthed.

It has been shown, for example, that in 60 per cent. to 70 per cent. of the tuberculosis cases under the care of the Dispensary there existed all the possibility for infection; that is to say, persons living in the given household had been for prolonged periods in closest proximity to one case, at least, of advanced tuberculosis. It has been similarly recorded how in more than 65 per cent. of the cases studied in one centre the tuberculous patient occupied the same bed with one or several persons, and that, in more than 75 per cent. of the cases, the tuberculous patient occupied, if not the same bed, at least the same room. It has again and again been demonstrated that approximately 70 per cent. of the cases occur in dwellings consisting of two rooms only.

The careful investigations undertaken by the Dispensary doctor and nurses at the homes have exposed the hopeless ignorance which, for the most part, exists not only concerning the proper treatment of the tuberculous patient, but also concerning the fundamental principles which are essential to healthy human life.

They have proved up to the hilt that tuberculosis is essentially a house disease and that in crowded centres numerous dwellings exist which are best described as tuberculous nests. They have pointed to the urgent need which exists for the hygienic education of the nation by skilled and sympathetic teachers and the training of fathers and mothers in the physiological principles which govern the rearing of healthy children.

It has been a chief aim of the Tuberculosis Dispensary to carry into the houses and workshops and into the general life of the community the great principles which underlie all sound preventive measures.

Few considerations in the realm of medicine and, indeed, of human experience are more completely satisfactory than the potential which exists for the re-creation of the individual home, and thereby gradually of the community at large, through persistent and well-directed efforts of intelligent doctors and well-trained nurses, who have the *entrée* into the homes where cases of tuberculosis exist. I cannot speak in terms of too great admiration of the work which has been thus effected in my own city through the unremitting labours of a succession of doctors and nurses attached to the Tuberculosis Dispensary. Comparing the present state of matters with what one was familiar with twenty-five years ago, when the work was commencing, the reformation effected in countless homes is very remarkable.

While much remains to be done towards the provision of better houses, with more accommodation and greater sanitary convenience than exists for the most part in the working-class dwelling, there is even more urgent need for a satisfactory diffusion of knowledge how to make the best use of accommodation and resources actually at the disposal of the household. Prolonged investigation has convinced me, as it has convinced the staff with whom I have had the honour of working, that the great difficulty with which we have to contend is the ignorance and helplessness of the average household in respect of air, cleanliness and food.

A great deal of confusion is caused by the mixing of two issues, which ought to be kept separate, namely, the question of an insufficient, truly in-

sanitary dwelling, and the misuse and mismanagement of a house, which itself is sufficiently good.

Most certainly the insanitary house should be ruthlessly condemned. Slum property which is beyond recovery should be closed and removed. It should constitute an offence to offer insanitary dwellings for occupation no less than to expose tainted milk or meat for human consumption. A licence or certificate should be issued by the local authority in the case of every house offered for human habitation, and no house should be occupied which has failed to obtain such a licence. The local authorities have a responsible duty towards those who cannot adequately protect themselves, and they are possessed of far-reaching powers.

This aspect of the matter is always before tuberculosis doctors and nurses worthy of the name. I find, for example, that, during the course of two years, eighty-one houses were specially reported by the medical staff of the Royal Victoria Dispensary, Edinburgh, to the Medical Officer of Health as insanitary, and calling for interference from his side.

On the other hand, if every citizen were placed to-day in a sufficient and sanitary dwelling, the second element of difficulty would remain, namely, the misuse and mismanagement of a house which in itself is sufficient for clean, healthy living. This is a practical question of alarming proportions. Its successful handling entails knowledge, tact, energy and patience on the part of doctors, nurses and visitors. It means the introduction into the ordinary dwelling of the cardinal principles which are the foundation of sanatorium treatment.

The object lesson of the sanatorium must be enforced in the home. The advance against tuberculosis will be in proportion as the cleansing and vitalising properties of fresh air are accepted as *axioms* of domestic life, and the compulsory environment of the developing child is conceived and maintained in obedience to the broad, physiological laws of which the sanatorium is the practical expression

To have this truth accepted and incorporated in the day-by-day life of the nation should be the goal of the campaign against tuberculosis.

SOME MODERN IDEAS ABOUT ANÆSTHESIA.*

By FRANK L. RICHARDSON, M.D.,
Boston.

THE duties of the anæsthetist have not been strictly defined. To my mind, the anæsthetist is to look after the welfare of the patient during the course of the anæsthesia, and to offer suggestions as to preliminary and post-operative treatment that concerns the anæsthesia. (*a*) If this definition is roughly accurate, it includes a number of duties besides the actual administration of the anæsthetic.

Not many years ago, it was enough if the anæsthetist got his patient off the table alive, no matter what discomfort the patients had before the actual business of operating, or what happened to them afterwards. Happily for all concerned, those days have passed in all enlightened communities. Not only is the surgeon critical, but the laity, at least in this community, expect certain refinements which not only add to the comfort and safety of the patient, but reflexly add to the reputation of the surgeon. A patient who has had one unfortunate experience will not be very likely to seek more surgical assistance unless he is actually driven to it—in fact, he may influence others from seeking assistance by his tales of suffering. Please do not think that I believe that all suffering can be prevented by the anæsthetist, but I feel sure that by proper co-operation between the surgeon and the anæsthetist a considerable amount of suffering can be avoided.

Let us begin with the preparation of the patient. The preparation depends to a certain extent on the field of operation, yet there are certain things done as a routine, such as the cleaning out of the intestines, and having the stomach empty.

It is the custom with some operators to give castor oil the night before the operation and an enema the morning of the operation. I believe that this is a most pernicious custom. While castor oil will certainly clean out the intestinal tract, it leaves a very unpleasant condition. Castor oil is an intestinal irritant, and as a result of its use after the violent evacuation, peristaltic movements cease for a varying length of time. If the operation has been on the abdomen this period of intestinal stasis facilitates the accumulation of gas with results that are always painful and sometimes dangerous. Isn't it more rational to give a saline cathartic or Russian oil, followed by a cleansing enema, than to use castor oil? Catharsis should never be too active before an operation because of the debilitating effect, and I believe that it is time well spent to take two days in preparation in cases of chronic constipation or in cases where the intestinal contents must be completely evacuated

Another matter to be considered is the question of food. Here I realise that I am treading on dangerous ground and that no hard-and-fast rules can be laid down, but there are certain fundamental principles that should be considered.

Where either ether or chloroform is to be the anæsthetic selected, we should try to have the food contain as large an amount of carbo-hydrates and sugars as possible, because it is well known that ether has a tendency to produce a condition of acidosis in patients not having a reserve supply of glycogen in the liver. It is also stated that the degenerative processes in the liver caused by chloroform anæsthesia are largely prevented if the liver has a sufficient supply of glycogen. Particular attention should be paid to this factor in children and debilitated patients. Starvation is above all things the condition that should be prevented, for where there has been a prolonged fasting the glycogen of the liver is rapidly used up. Diabetics form a special group, and I feel strongly that no diabetic should be operated on except in the gravest emergency without a preliminary course of dietetic treatment given by a competent medical man. While it is true that we get away with many operations on diabetics under ether, we are sometimes surprised and alarmed at the symptoms following comparatively trivial operations in other cases.

Around Boston, until within a very short time, we have hardly considered any other anæsthetic than ether. There are several reasons for this. Of all the general anæsthetics, except nitrous oxide, ether is the safest in the hands of the unskilled or moderately skilled. We have, too, a pride in the part Boston has played in the introduction of ether, and this is one of the principal factors that has led to its traditional use here. Ether is not the only anæsthetic to be considered, even if it is the safest in the majority of cases. Nitrous oxide, nitrous oxide and oxygen, chloroform, etc., must at least be considered, and in selected cases one of these is sometimes safer than ether.

I should like just to mention a few indications for the use of some other anæsthetic than ether. No case of tuberculosis of the lungs should be given ether without consideration of some other anæsthetic. The danger is in direct proportion to the

* Read before the Chirurgical Society of Boston.
(*a*) *Boston Medical Journal*, December 23rd, 1915.

activity of the process and the general condition of the patient. I have quite recently seen two cases of prolonged ether anæsthesia in which the administration of ether lighted up an old and unsuspected tubercular process. Fortunately in these cases the process quickly quieted down, but that was merely an accident. In tuberculosis of recent origin, and especially in active tuberculosis, the patient may recover from the operation only to die from tuberculosis, and the anæsthetist, while he escaped censure, may have been responsible for the unfortunate outcome. Bronchitis is another condition in which one should consider some other anæsthetic.

Since the substitution of novocaine for cocaine in local anæsthesia we have been doing more and more operating with this form of anæsthesia. It has great advantages in many cases. In deciding between local anæsthesia and general anæsthesia there are a number of questions to be considered. Among these are duration of the operation, site of the operation, sepsis, the temperament and general condition of the patient. Local anæsthesia does one thing that must never be overlooked—it does away with the mental and physical discomfort of taking a general anæsthetic. It is true that this discomfort, thanks to more refined methods of giving general anæsthetics, is now much reduced, so that many patients have no physical discomfort and the period of mental discomfort is greatly shortened, yet to some people taking an anæsthetic rather than the operation is the thing to be dreaded. On the other hand, there are many people whose temperament contra-indicates the use of local anæsthesia. They do not wish to be present at their own operation. The proper use of morphine and scopolamine will in many cases do away with this objection, and I wish to urge the more general use of morphine and scopolamine in proper doses as a preliminary to the larger operations under local anæsthesia.

Spinal anæsthesia is another procedure that has a very distinct place. I have rather strong opinions on this subject. Statistically it is much more dangerous than most general anæsthetics or novocaine locally, but in given cases I believe that it is much less dangerous. Especially is it true of operations on the prostate and the more serious operations on the rectum. It is also the anæsthetic of election in diabetics where the field of operation is not too high, and it must be considered in cases with pathological lung conditions.

There is one very considerable advantage that these forms of local anæsthesia have over general inhalation anæsthetics. Of themselves they do not interfere with the taking of regular and sufficient food, which may be of greatest importance.

Nitrous oxide and nitrous oxide-oxygen are anæsthetics that are not properly considered in our selection. Both have been sadly neglected except by those men who have the nitrous oxide-oxygen hobby, and by those few have at times been overdone, so that I think we all share a prejudice against the use of nitrous oxide-oxygen. The truth is we do not know all we should about nitrous oxide-oxygen, and I must confess that I advise its use only in a very limited number of cases. In general, these are cases in which the operator does not require muscular relaxation, and where the operation requires only a short anæsthesia. It now seems crude in most cases for anyone to do a paracentesis of the drum without an anæsthetic or a dilatation and curettage under ether when nitrous oxide-oxygen is available. I mention only these two operations, but of course there are many others where it is an excellent anæsthetic both for the patient and the operator, and does away with some of the discomfort of most general anæsthetics.

As to the actual giving of the anæsthetics, there are only a few things that need be said. One must remember that all anæsthetics are poisons with the possible exception of nitrous oxide, and therefore the less taken by the patient the better. This being the case a position on the table which gives muscular relaxation, and surgical *technique* which does not require profound anæsthesia are always desirable. It is never wise, however, to hurry the induction of the anæsthesia. One anæsthetic method that I wish to call particular attention to is the method of rebreathing or closed method. Some anæsthetists boast of the small quantity of ether required by this method. It is true that a much smaller amount of ether is added to the inhaler, but it is also true that, where asphyxia plays no part in the maintenance of this anæsthesia, the patient is still getting 15 per cent. by weight of ether vapour, the only difference being that the ether exhaled by the patient is again inhaled with this method instead of being thrown off into air as in the open method. I said "if asphyxia played no part in the anæsthesia," but as the method is usually applied asphyxia does play a part, and a part that is far from desirable. Patients anæsthetised by the closed method are frequently a little off colour, and I believe that they have a greater amount of anæsthetic shock or fatigue. I do not wish it understood that rebreathing has no place in the giving of anæsthetics—this is not true, but when rebreathing is used the oxygen content in the mixture must be maintained as high as in the surrounding air, and we must realise that although the amount of ether added to the inhaler is much less than by the open method, the per cent. inhaled by the patient must be approximately the same. What, then, are the advantages of using this method in any cases? According to Henderson's theory a certain increase in the amount of carbon dioxide inhaled combats the state of shock. While I do not entirely believe in all of Henderson's deductions, it is clinically true that in some cases a condition which we call shock is somewhat relieved by an increase in the amount of carbon dioxide inhaled. We can, however, maintain a proper oxygen content while still increasing the amount of carbon dioxide. This leads to a consideration of the condition of shock. There is probably no more disputed phenomenon in the whole realm of surgery, and when we collect all the real facts about it we have very little to show. Of course, shock is a real condition, but of the mechanism of shock we know very little. Crile's theories, while they are in part true, are not the whole story by a long way. Personally, I think there are two, sometimes distinct, states :—True surgical shock, which is due in part to hæmorrhage and in part to trauma, causing afferent nerve impulses which result in exhaustion of the central nervous system. There is, however, another state resembling shock in which these factors play but little part. This is due to the length of the operation and certain factors in the course of the anæsthesia. I prefer to call this condition fatigue, though whether it differs in kind or only in degree from true surgical shock, I cannot say.

The operating table and the patient's position on the table are other matters about which something should be said. Is there any reason why the operating table should be so uncomfortable? Why not have pads on it thick enough to take off some of the board-like feeling and which will, to a certain extent, prevent the radiation of heat from the patient's body? In most hospitals they put a small pad under the lumbar curve of the spine, so that

when muscular relaxation comes on, this lumbar curve is maintained and there is less strain on the back. Placing a pillow under the knees is of almost as much importance in preventing the post-operative backache, and has the advantage that it promotes relaxation of the abdominal muscles, thus giving the surgeon more room in abdominal work. Let me say one word about the Trendelenburg position. As it is usually carried out, the legs are flexed at the knees. This in itself puts a marked strain on the abdominal muscles, requiring a much deeper anæsthesia to give the required muscular relaxation. It also puts an added strain on the back and is a contributing factor to backache in these cases. I believe that it is very much better to use well-padded shoulder pieces and keep the legs out straight, even at a slight inconvenience to the surgeon. If you have never laid on a table in the Trendelenburg position, with the legs down, I think you will be quite surprised at the amount of muscular tension this position gives. One should avoid whenever possible any position placing the muscles in strain while under an anæsthetic as we do while conscious.

As before stated, the anæsthesia should be as light as possible. Certain unnecessary factors in operative *technique* make it necessary at times to carry the patient along in a deeper stage of anæsthesia than is desirable. Rough handling of wounds and of the abdominal organs makes it necessary to have a much deeper anæsthesia than careful handling would require. While I am strongly in favour of rapid operating, I feel that it is rarely, if ever, necessary to be rough. This rough handling not only requires a deeper anæsthesia, but even when the anæsthesia is deep enough to maintain muscular relaxation the amount of surgical shock is markedly increased. In certain regions and in certain procedures it is particularly desirable to be gentle. Any traction on the intestines or stomach should be particularly gentle. I have seen an abdominal retractor put into a wound and given a jerk in retracting the muscles and peritoneum that caused an immediate spasm of the muscles and an amount of shock that was almost unbelievable. The same thing may occur if a loop of intestines is pulled roughly out through a small wound. In this connection let me commend the self-retaining retractor, which gives retraction without the intermittent pulls and jerks, each one of which acts as a direct stimulus to the contraction of the muscles pulled upon. It is not cutting that causes shock, but pulling and other manipulation. One should be as careful to handle tissues gently under a general anæsthetic as one is under local anæsthesia, if the best results are to be obtained. I have but one word more to say about *technique*. Surgery is done primarily for the benefit of the patient. When the patient is ready to be prepared, the attendants should be *ready* to do the preparation, and the surgeon should be ready to commence the operation as soon as the patient is deeply enough anæsthetised to allow it.

Post-operative care is another matter for consideration. Fortunately there have been great advances in the last few years, and some of the absurdities of the older post-operative treatment have now become obsolete, such, for instance, as withholding water. If there is any one time when a patient needs water it is after operation. He needs fluid to make up for loss by bleeding and by perspiration. The fluid taken also dilutes toxic substances absorbed from the intestines so that they are eliminated with less irritation by the kidneys. I believe that there is less nausea and vomiting where water is given. The quantity of fluid may be greater, but the vomiting is of shorter duration and the straining is less. Whenever vomiting persists acidosis should be suspected and prompt measures for combating this condition should be instituted. It is much better to prevent acidosis by proper diet before operation than to cure it after operation, but in cases where proper diet cannot be given before operation we can usually relieve the condition quite promptly afterwards. Irrigation of the colon with sodium bicarbonate water (3 teaspoonfuls of sodium bicarbonate to 2 quarts of warm water), followed by a nutrient enema of 5 per cent. dextrose solution, will usually relieve the condition quite promptly. Feeding a patient on broths just before and just after operation is one of the absurdities that we shall see entirely disappear within the next few years. They have almost no nutrient value, they throw considerable work upon the kidneys, and they do not greatly relieve hunger. Why should we give them at all. The only possible excuse is that they do not leave any residue in the intestines. Carbohydrates should be given, and when they cannot be given by mouth in sufficiently large doses they should be given by rectum.

Let us again consider the question of backache. Proper position on the table is not always enough to prevent this, and it is well to be sure that the back is not in a position of strain when the patient is returned from the operating room to the bed. A pillow under the knees helps. Frequent changing of the patient's position is also of assistance.

As you see, this paper makes no pretence of being exhaustive. It is intended to call attention to certain neglected procedures and to promote discussion of our present methods, which it is hoped will be for the best interests of our patients.

MENTAL DEFECTIVES: THEIR IMPORTANCE.

By H. VALENTINE WILDMAN, Jr., A.B., M.D.,
New York,
Assistant-Surg. U.S. Public Health Service; formerly Assistant-Physician Manhattan State Hospital; Attending Physician Clearing House for Mental Defectives.

Why of late years have those of the medical profession interested in mental disease been devoting a great deal of their attention to the mental defective of the higher grade? Why has the defective individual been attracting so much notice? Is he a type that fits with the large group of insane, on the one hand, or with the group of idiot on the other? Is he a new type—some outgrowth of conditions under which we live at present; some product of modern civilisation? If he is neither idiot nor insane, why should so much interest be centred upon him? Why should so much time and money be spent devising methods to detect and control him? Why, if a foreigner, should he be denied admission to the country? In other words, what does the term "mental defective" convey? What is he? Wherein does he differ from other mental types? Why is he difficult to detect? Of what social or economic importance can he be that he should be the object of so much attention, country-wide in its extent. (*a*)

The reason for centering so much attention on these members of society is, that it is now recognised that they are a menace to the race by breeding defective descendants who are most likely illegitimate as well, and that they are one source of enormous expense to the country. These people, while dangerous, either actually or potentially when at large, may be made, under proper supervision, partially if not wholly self-supporting, and can be thereby shielded from bad influences, which, in the

(*a*) *New York Medical Record*, December 25th, 1915.

nature of their trouble, they cannot resist, and from environments to which they would find it impossible to adapt themselves.

The mental defective is no new type, Cain, of biblical fame, being perhaps of the same stratum. He is, to repeat, no new type except in the sense that pellagra is a new disease in this country. He has always been with us, but the diagnosis has been made only in comparatively recent times, his lack of responsibility has only lately been appreciated. The separation and realisation of the importance of this type—this is new; not the type itself. The moron is ubiquitous and has been so, but his ability to harm has only recently been emphasised.

And now we come to the question of what is he?—this defective or moron as he is called? What are his characteristics? How can he be identified? Is simple inspection sufficient? Must more refined tests be applied? Does age enter into the question? In other words, what is he and how do we detect him?.

Roughly speaking, it is extremely difficult, if not impossible, to make a diagnosis by inspection alone. The individual in question to the superficial view may make a fairly good impression and it is only by close attention to details of physical make-up that the suspicion may be aroused that the subject may be abnormal. These alterations in physical development are the so-called stigmata of degeneration to the importance of which attention has frequently been called especially by Lombroso. They consist essentially in abnormalities in the shape, size, or position of the head, ears, nose, and other features, or in a certain infantile cast of countenance. The suspicion having been aroused must be confirmed or refuted by a mental examination by a competent alienist.

In a given case this usually discloses an individual who is mentally years below his actual age, but not below the seventh year. A person with a mental age below seven is probably an imbecile and so defective that little or no difficulty is offered in his detection, and as he is not as likely to be allowed to run at large, he consequently does not present the menace the more highly developed defective does. The moron is deficient in some socially important trait which depends on some congenital difficulty or mental defect which shows itself in one of three main fields: in the domain of the will, or in the intellect, or in the development of the moral sense. He is particularly defective in the exercise of the powers of judgment and usually shows a marked inability to grasp the meaning or shades of difference of abstract nouns.

Another well-developed characteristic of the higher grade defective is his ability to do a fair amount of work and get along well while under supervision or discipline, with utter failure when this is removed. This trait is particularly in evidence among the class of sailors or rather among a certain percentage of the class of sailors. While under the discipline of the ship they perform their duties quite well, but when relieved from surveillance they are totally unable to care for themselves or their money. Although they may have worked hard for months and suffered more or less hardship yet as soon as disembarked they spend their savings with a lavishness and recklessness that has made the expression "like a drunken sailor" in reference to foolish extravagance, a by-word.

Therefore the reason for and the importance of the detection of this class of mentally abnormal individuals is quite self-evident. Left to themselves, they are an expense and a danger through either their moral lapses or their criminal delinquencies or both. If detected and segregated, they may be able to make their own living or they may not, but at least they are prevented from propagating a feeble-minded race.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

PRO PUBLICO BONO.

To the Editor of The Medical Press and Circular.

Sir,—From time to time in the columns of the Periphery woman has formed the subject of somewhat scathing comment: woman the Pathological, woman the Inefficient, woman the Arrogant, and woman the Sedulous Ape. She has not escaped lightly at the hands of her reviewer, and it is to be doubted whether she has entirely deserved the measure of opprobrium which has been heaped upon her. It is noticeable that she has said little, if anything, in her own defence. Woman is a silent creature. She is also a hard-working one; and those women who at the present moment have something which they must or may do are, as a rule, too occupied in doing it to spend time in defending either themselves or their methods. And it is just because women can do, and in many instances are doing, such excellent work that the measure of real truth in the charges brought against them is so profoundly to be regretted.

In times of stress, such as the present, men ought to feel that they can depend upon the loyal and intelligent co-operation of women. They ought to be able to say: "Here is something that you could do—do it, and help us." That they largely refrain from such a course is, no doubt, partly due to an elemental something in their inherited attitude towards women in general. But the fundamental obstacle lies with woman herself. There are many things done by men which women could also do, if—and it is a great "if"—they would do them in a woman's way. But the woman who does a man's work is not content to do it to the utmost of her feminine ability, considerable though that ability may be. She dissipates her energies in aping the man whom she replaces, his attitudes of mind and body, his speech, his very dress. She becomes, in fine, the human counterpart of that pathetic travesty, the sunflower, who—

"—in the lost endeavour
To live his life, has parted, one by one,
With all a flower's true graces, for the grace
Of being but a foolish mimic sun.
With ray-like florets round a disc-like face."

Now, to assume the fetishes and taboos of a clique to which you do not belong, is assuredly a thing which is not done. Nevertheless there are many women, constitutionally incapable of a grave error of taste in any other direction, who do yet err in this: that they copy the style and manner of an exclusive class—namely, men, to which (being women) they can never belong. Hence they provoke bitter opposition, ridicule and contempt in the quarters where, upon every count, it is most expedient that they should avoid it. If men hate a mannish woman, women despise her.

At the present moment, when our large general hospitals are hopelessly understaffed, the inevitable question arises: Why not relieve pressure by appointing women to the resident posts? The equally inevitable answer seems to be, not that women could not do the work, but that their presence would not be well tolerated. Now, if not,

why not? The need is very great, and there is every probability of its becoming greater. In all communities individual jealousies and antagonisms must arise. But that, merely because she is a woman, the medical resident of a hospital should be unable to "get on" with her matron, sisters and nurses, and at the same time win the co-operation and approval of the visiting staff, is unthinkable. Admitting faults in the attitude of the hospital personnel—and we know how hard a death some preconceived ideas die—the main source of difficulty must, in the end, lie with the woman herself. For limitations, whether masculine or feminine, there is toleration; for artificiality of pose, there is none.

I am, Sir, your truly,

London, N.W. L. F.

DIET AND THE CARE OF CHILDREN'S TEETH.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The leading authority, whose identity is not thickly veiled by his initials, has done a service to the medical practitioner by stating in his letter of February 2nd the chief basic facts which govern our knowledge of dental decay. The family doctor is looked upon as a kind of walking encyclopædia of medical knowledge. It must be a help to him when he is provided with true and simple answers to so many of the questions with which he is constantly beset. To the expectant mother who asks what can be done to ensure that her child shall have good teeth he can only reply that no specific treatment towards this end is of any avail. If she desires a healthy, robust baby she must, before all things, attend to her own health. She must remain free from physical and mental overstrain, and by hygiene and dietary promote her strength. She should try to develop a reserve of physical strength which may enable her to provide for her offspring for the proper period a supply of natural food. A mother who can do this is giving her baby a better expectancy of life, as well as the prospect of "a good constitution," including good teeth. As soon as the child is old enough it ought to be taught to chew thoroughly all its food, and ought to be provided with in due course articles of of food which call instinctively for mastication. Exercise of the muscles of mastication lead to their development, and that of the bone to which they are attached. The lower jaw, in enlarging, carries with it the arch of the upper maxilla, the teeth of which overlap the lower all round. The first set not less than the second ought to be periodically inspected by a dental surgeon. Much suffering is prevented by filling spots of decay in temporary molars before the sensitive dentine is reached. The first permanent molars appear at the sixth year. They are often mistaken for temporary teeth; but they are to be known by their appearance beyond the first set in the jaw developing backwards. These teeth, for some inexplicable reason, are much more liable to decay than any others of the second set. If attacked, they ought to be filled at once and preserved, until when, between the age of 12 and 14, the second permanent molars are well in place. At this age, when crowding exists, these teeth should be extracted. A crowded set will gradually spread apart, and the space previously occupied by the molars will become gradually obliterated. This measure will in most cases allow of the advance of the wisdom tooth into a useful position, insteading of remaining partly buried against the ramus in the lower jaw. To give instruction with regard to the hygiene of the mouth—the maintenance of perfect cleanliness so far as possible—is the function of the dental surgeon, and this subject is dealt with in books on dental surgery.

I am, Sir, yours truly,

A HOSPITAL DENTIST.

London, W., February 9th.

MONEYLENDERS AND THE MEDICAL PROFESSION.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—One of your correspondents a short time ago suggested that although financial subjects do not fall within the province of a medical paper, yet a medical editor, by going a little out of his way, might often save some of his unbusinesslike readers from falling a prey to the sharks which lie in wait for men who have no real knowledge of business. I send enclosed one of three circulars which I have received within the last fortnight from West End moneylenders. It is against these gentry that I ask permission to warn any of your readers who are ingenuous enough to need it. I have good reason to believe that these circulars have been specially sent out to men whose names appear on the *Medical Register*, where my name is also printed, although I have not been in practice for many years. The circular you will see spreads the usual net. Its benevolent author will wait upon clients at any part of the country, and will lend them, probably with no other security than a note of hand, any sum from £5 to £50,000. The *bona fides* of these offers may be judged from the fact that the *Times* has for some years refused to admit moneylenders' advertisements. And I may remark by the way, apropos of the letters on the "Ethics of Journalism" appearing in your journal, that very few of the newspapers have followed the example of the leading paper, although they must know quite as much about the matter. I would like to point out that the Money Lenders Act has proved an entire failure. Once in the hands of these gentry, there is no escape, save through the intervention of a court of law. The appeal to the law involves the exposure publicly of the whole sordid story. The Act is almost entirely in favour of the lender, thanks, as usual, to the inability of our Parliamentary draughtsmen to frame clauses in unequivocal phrases. An attempt to fight a moneylender in a High Court often results in the undeserved disgrace of an innocent victim, who goes away saddled with a bill of costs and fixed firmly in the grip of his merciless enemy. The advice to those about to consult a moneylender is distinctly—Don't. The only safe course in financial trouble is to consult a friend who is a business man, one's solicitor, or one's banker. If money cannot be raised with their advice and assistance, it is better to face with manly courage any alternative rather than to put oneself in hands where ruin is inevitable.

I am, Sir, yours truly,

SENEX.

Manchester,
January 21st, 1916.

BRIGADE-SURGEON LIEUTENANT-COLONEL ANDREW BARRY, I.M.S., of West House, St. Andrews, Fife, left personal estate of £23,066.

DR. JAS. ADAMSON, through ill-health, has resigned the position of medical officer to Hetton Urban District Council, after 20 years' service. He was one of the pioneers of mining ambulance work, and first commenced instructing Durham miners in "first-aid" nearly 40 years ago. In 1870, he introduced the first stretchers used at Hetton in connection with the local collieries, the injured having previously been taken home on carts.

TRANSACTIONS OF SOCIETIES.

THE ROYAL SOCIETY OF MEDICINE.

Section of Obstetrics and Gynæcology.

Meeting held Thursday, February 3rd, 1916.

Dr. M. Handfield-Jones in the Chair.

Dr. Herbert Spencer and Mr. E. A. Barton showed a "speculum-camera," a combined Fergusson speculum and camera fixed together by a catch, for taking photographs of tumours and the affections of the cervix and vagina. The instrument measured $8\frac{3}{4}$ inches in length and had a fixed focus with a depth of $\frac{3}{16}$ inch. Illumination was obtained from six electric lamps surrounding the lens. The exposure was 20 to 30 secs. Lantern slides of the photographs taken by the instrument were shown with the epidiascope.

Dr. Herbert Spencer showed a wire-fed tubular needle for use in closing vesico-vaginal fistulæ. The needle was a modified and simplified form of Smith's cleft palate needle, which he had used successfully for many years in closing vesico-vaginal fistulæ. In the instrument shown the silver wire was propelled by simply grasping it with the finger and thumb.

Dr. Herbert Spencer showed a needle-holder for vaginal hysterectomy and deep pelvic work. The holder was specially designed for vaginal hysterectomy and for ligaturing pedicles in deep and confined spaces. The needle was held by means of a slot at an acute angle with the handles and, owing to the slot not being extended to the end of the jaw, the short "delta" metal needle could be introduced and withdrawn in the same direction by the one instrument.

Remarks by Dr. F. J. McCann.

Dr. Walter Salisbury read a short communication on

THREE CASES OF LABOUR OBSTRUCTED BY OVARIAN CYST.

Case 1. The patient had been in labour six days and the membranes had ruptured two days before her admission to Queen Charlotte's Hospital. The child was dead. A large tense cyst filled up the pouch of Douglas. Dr. T. G. Stevens opened the abdomen and lifted the uterus outside. A dermoid cyst of the left ovary, the size of an ostrich's egg, was withdrawn from the pelvis with some difficulty, being ruptured in the process. The cyst was removed and the uterus replaced in the abdomen. A dead child was delivered with axis-traction forceps *per vias naturales*. The abdominal wound was then closed, and the patient made an uninterrupted recovery.

Case 2. A midwife, finding that the descent of the head was obstructed by a mass which could be felt *per vaginam*, sent for medical aid, but a living child weighing $7\frac{1}{4}$ lbs. was born before the Queen Charlotte's District Medical Officer could arrive. The patient was sent into Queen Charlotte's Hospital, and Dr. J. B. Banister opened the abdomen, removing a semi-solid multilocular cystadenoma of the left ovary weighing $2\frac{1}{2}$ lbs. The cyst had ruptured, and a large quantity of blood and mucoid material was present in the peritoneal cavity. The patient made an uninterrupted recovery.

Case 3. The patient was admitted into Queen Charlotte's Hospital in labour. In the pouch of Douglas there was a hard fixed mass which was diagnosed as an ovarian dermoid. Dr. R. D. Maxwell opened the abdomen. As the pelvic mass was not very accessible, Cæsarean section was performed and a living child delivered. After this the tumour was removed. The patient made an uninterrupted recovery.

Dr. Salisbury discussed the different methods of treatment that had been adopted in these cases.

Dr. Herbert Spencer said that he was naturally glad to find that the treatment of the first case was considered the best, for this method of treatment had been brought before the Obstetrical Society of London by the speaker eighteen years ago; yet, in spite of his frequent criticisms, many unnecessary Cæsarean sections had in the meantime been performed in such cases. He thought it was time they ceased. With regard to the third case, there would be differences of opinion as to what should be done in labour when the os was not dilated—whether waiting till the os dilated or Cæsarean section should be the line of treatment. There was another treatment which had not been mentioned by the author which was much better than either, namely pushing up the tumour in the Trendelenburg position, which Bossi had shown twenty years ago to be quite easy even when impossible without its aid. The speaker thought the knee-chest position under anæsthesia might be still more efficacious. In any case it should certainly be tried before resorting to Cæsarean section. He had a slight criticism to make on the description of the size of the tumour in this case, which was said to be that of an orange and afterwards this was crossed out and cocoa-nut substituted. It was of some importance in the case of ovarian tumours obstructing labour to know the exact size of the tumours, and, however convenient during clinical examination the likening of the size to that of familiar objects was, tumours removed by operation should have their dimensions accurately given in inches or centimetres.

Dr. R. D. Maxwell also spoke.

Miss Francis M. Huxley, M.D., read a short communication on a case of

FATAL RUPTURE OF THE BLADDER DURING THE PUERPERIUM.

Mrs. W., æt. 26, a primipara, was delivered by forceps for delay in the second stage of labour, December 21st, 1914—right occipito-posterior position of the vertex. The bladder was not catheterised beforehand. The puerperium was uneventful until the ninth day, when, after making a vigorous stretching movement of the right arm, the patient was attacked by violent abdominal pain, collapse and vomiting. Mrs W. was seen in consultation by Dr. Cuthbert Lockyer the following day and admitted at once to the Samaritan Hospital. The condition by this time was extremely bad, there being well-marked signs of general peritonitis, with free fluid in the abdominal cavity. No urine had been passed since the onset of acute symptoms, thirty hours before. Forty ounces were withdrawn on admission, thirty-four ounces eight hours later. In spite of stimulant treatment the patient's state became gradually worse, resulting in death at 2 p.m. on December 31st. *Post mortem* a condition of general peritonitis was found, due to rupture of a very thin-walled and much distended bladder. The rupture took the form of a horizontal jagged slit at the summit of the fundus of the bladder. There were no local signs of sloughing nor of bruising. The questions arise as to *when* and *why* rupture of the bladder occurred? Miss Huxley thought that there could be little doubt but that it took place when the patient made the stretching movement already described, on the 9th day of the puerperium, because the onset of symptoms was sudden and the patient's state was said to have been satisfactory until then, and suggested the following explanation as to *why* it happened. Forceps were applied to the fœtal

head when the bladder was distended, producing increased pressure on its walls and bruising of its base and of the urethra. This produced atony of the bladder, so that the state of distension was never overcome, the patient only partially emptying the bladder. The sudden movement took place at a time of extra distension, and the strong contraction of the abdominal muscles was sufficient to produce spontaneous rupture.

Dr. Amand Routh asked if it was not possible that the muscle of the bladder was torn during the forceps delivery when the bladder was full, and that the peritoneal covering only yielded immediately previous to the acute symptoms when septic peritonitis so suddenly occurred.

Dr. McCann asked if a microscopical examination of the bladder wall had been made; for on looking at the specimen the bladder wall seemed to be attenuated at the site of the rupture. From the position of the rupture it was difficult to furnish an explanation of the cause.

Miss Huxley replied.

Dr. Cuthbert Lockyer read for the President a short communication on

CHORION-EPITHELIOMA FOLLOWING VESICULAR MOLE.

The patient, æt. 49, was delivered of a vesicular mole 20 years previously. In July of last year she expelled another vesicular mole. For three weeks she made good progress, then hæmorrhage recurred. Five and a half weeks after the passage of the mole the President saw her again in consultation, and, finding that the uterus had increased in size, performed hysterectomy. The uterus was found to contain a small mass of chorion-epithelioma which had invaded the muscular wall. The President asked (1) with what degree of frequency does vesicular mole occur more than once in the child-bearing history of any woman? (2) What is the earliest period at which well-marked chorion-epithelioma is found to be present after the expulsion of a vesicular mole? (3) Does this disease perforate the wall of the uterus with any degree of frequency before expulsion of the mole? (4) What constitutes the difference between malignant vesicular mole and benign cystic degeneration of the chorionic villi? He suggested that the resisting power of the uterine wall might be a factor of some importance.

Dr. Amand Routh said that 30 years ago it was thought that if a woman had a vesicular mole she would be likely to have a recurrence if pregnancy again occurred. He had, however, never known of a woman having such a recurrence. He agreed as to the difficulty of detecting the degree of malignancy in chorion-epithelioma, so as to be able to decide in what cases it was justifiable to remove the uterus if the lungs were already attacked, or where it was hopeless to interfere.

Dr. Cuthbert Lockyer replied.

INAUGURAL ADDRESS BY THE PRESIDENT.

The President, in delivering his Inaugural Address called the attention of the Section to the need of enlisting the sympathies and activities of general practitioners in the work of the Society. At present the papers and short communications were contributed almost entirely by consulting surgeons and physicians, and the meetings were rarely attended by the men, who working as family doctors, possessed such excellent opportunities of following a case through its entire length, and of watching the effects of varied forms of treatment. He pleaded for the appointment of special clinical committees to carry out a system of collective investigation, and to obtain the assistance of large numbers of general practitioners in bringing forward and tabulating groups of cases. In the course of his paper he narrated ten cases of double uterus, and demonstrated that this abnormality was not so rare as physicians had usually deemed it to be. The clinical histories of these cases were given in detail, and showed what an important bearing the subject had on diagnosis and treatment. Though only one or two cases might come under the notice of any one practitioner, yet by a combined effort a full and exact knowledge could be built up, and some of the present uncertain and inexact beliefs could be placed on a sound scientific footing. There was much work still needed before we could hold accurate views on the latency of tubercular disease in pregnancy, or again on the comparative advantages and disadvantages of scopolamine in the course of labour; the views of hospital workers and teachers needed to be tested by the experience of general practitioners, and it was only by a carefully planned effort of collective investigation that this result could be obtained.

Dr. Amand Routh congratulated the President on his novel type of presidential address, and thought that his suggestion that a committee should be formed to collect cases of double uterus would prove most valuable.

Dr. Herbert Spencer said that he had listened with great interest to the valuable paper on a somewhat rare though very important condition. He had heard also, with great pleasure, the suggestions the President had made as to the need of obtaining the interest and help of general practitioners, who were in a position to make contributions of great value to their proceedings. The need of collective investigation of rare and important conditions was very urgent. As an instance he mentioned the treatment of cancer of the uterus. If all London hospitals interested in this "subject would consent" to report their cases on identical forms, we should have a mass of statistics unequalled by any city in the world. He hoped committees would be appointed to try to bring about such collective investigation.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Surgery.

Meeting held Friday, December 3rd, 1915.

Mr. William Taylor in the Chair.

A NEW SUBSTANCE FOR PYELOGRAPHY.

Mr. A. A. McConnell read a short note on above. He stated that he had asked Professor W. Caldwell, of the Royal College of Surgeons, Ireland, for a substitute for collargol, which would be non-irritating, opaque to the X-rays, and capable of flowing through a fine ureteral catheter. Professor Caldwell had made a preparation of bismuth, which had not been made before, and which had these properties. The provisional name given to the substance was "Skirol." Mr. McConnell showed several radiograms of the renal pelvis injected with skirol, and stated that he had obtained better results with this preparation than with collargol. All the skirol was washed out of the pelvis before any perceptible precipitation took place. Radiograms taken the following day showed no trace in the pelvis. In no case were there any objectionable sequelæ.

NOTES ON TWO CASES OF ANEURYSM DUE TO BULLET WOUNDS.

Mr. C. Arthur Ball read notes on above. The first case was that of an officer who was wounded

on April 25th, 1915, at St. Julien. Two pieces of a broken bullet entered his right thigh. After twelve or fourteen days he noticed a pulsation over one of the wounds, but he was told this was only the "femoral pulse." At a medical board on July 10th, 1915, the aneurysm was discovered, although the patient himself thought he was fit for duty.

Operation.—The artery was exposed, and a Crile's clamp applied above and below. The sac was dissected out, and as Mata's operation was not possible, the artery was ligatured above and below the sac. The following morning the foot was warm, no pain was felt, and pulsation was present in the dorsalis pedis artery, so that it seemed likely the collateral circulation had been previously established.

The second case was of an aneurysm of the axillary artery. Private W. was wounded at Loos on September 25th, 1915. The bullet entered just below the outer end of his right clavicle. X-ray examination showed a comminuted fracture of the surgical neck of the humerus. The bullet lay in the thorax. The wound healed in a few days, and the limb was put in plaster of Paris. About three weeks later a pulsating swelling was noticed about the second and third stage of the axillary artery. When the sub-clavian artery was controlled, the swelling diminished to about half its size. The third stage of the sub-clavian artery was ligatured. No alteration in the temperature of the limb was subsequently noticed. A pain which he had referred to the hand immediately became better. The arm and hand rapidly recovered power with the exception of the area supplied by the ulnar nerve, and this was improving. There had been no return of the pulsation at the site of aneurysm, and the swelling had disappeared.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Pathological Meeting held February 4th, 1916.

The President, Dr. Leonard Dobson, in the Chair.

The President showed a specimen and microscopic section of sarcoma of the brain, situated in the posterior part of the left middle frontal convolution. The first symptom in this case was an epileptic fit on December 18th followed by amnesia, aphasia, right hemiplegia, and death on January 23rd. The patient was a man, æt. 47.

Dr. J. M. Bernstein showed specimens of (1) syphilitic liver, male, æt. 7 months, (2) large aneurysm of thoracic aorta, (3) Hodgkins' disease showing lymphoma of breast, (4) perforation of œsophagus from fish bone, death from acute suppurative mediastinitis, (5) polycystic kidney, (6) primary sarcoma of root of lung—secondary growth in liver. Dr. Bernstein also described a case of acute lymphatic leukæmia from which he showed a blood-film.

Dr. Arthur Saunders showed (1) a kidney from a case of acute suppurative nephritis affecting one kidney only, child, æt. 1, (2) with Mr. Tyrrell Gray a parovarian cyst from a child, æt. 2 years (3) with Dr. Reginald Morton, a specimen and skiagram of a large aortic aneurysm.

Major W. McAdam Eccles showed (1) a microscopic section and skiagrams from a case of mammary tumour associated with a lesion of the tibia, female, æt. 34. In this patient the head of the left fibula was found, on examination by Major McAdam Eccles, to be lying outside the external condyle of the femur; the shaft of the left tibia appeared to be displaced outwards and somewhat upwards although the proximal epiphyseal part of the bone seemed to retain its normal relationship to the condyles of the femur. Examination of the right knee revealed a somewhat similar condition but in a much earlier stage, the fibula being in its normal position, but the tibia having distinct rarefaction. A section of tissue removed from the breast showed typical atrophic scirrhus, while that from the tibia gave no evidence of any neoplasm, primary or secondary, (2) skiagrams of two wedge-shaped dorsal vertebræ, male, æt. 28, no signs of any inflammatory mischief nor of any real "crushing."

Mr. H. S. Souttar showed specimens of (1) Elephantiasis of vulva—huge mass excised, patient 8 months pregnant, later, normal confinement, patient æt. 35, (2) complete prostatic tumour removed by suprapubic operation, patient æt. 70, (3) cystic adenoma of thyroid, female æt. 26, (4) scirrhous carcinoma of breast, patient æt. 50, (5) carcinoma of stomach, operation—partial gastrectomy and posterior gastro-jejunostomy, male æt. 65, (6) large nævo-lipoma of face removed by excision. Mr. Souttar said that the patient, a male æt. 21, had those other congenital defects, viz., (*a*) spina bifida occulta over sacrum, (*b*) gross scoliosis, defective vertebra (1st lumbar), (*c*) multiple nævo-lipomata on back, (*d*) aortic stenosis, (*e*) mitral regurgitation, (*f*) ? patent foramen ovale.

Mr. O. L. Addison described a case of aneurysm of the radial artery at the back of the wrist, female, æt. 73.

Dr. George Pernet showed, (1) cultures of favus in various media from the case of a child whose mother had suffered from favus for 30 years, (2) cultures of ringworm, (3) cultures of streptothrix to compare with megalosporon ringworm.

Major J. M. Atkinson showed several skiagrams of injuries to bones due to shrapnel.

Mr. H. Tyrrell Gray showed the following skiagrams, (1) congenital scoliosis, half lumbar vertebra only, (2) congenital absence of half the 8th and 11th dorsal vertebræ, thirteen ribs on one side and twelve ribs on the opposite side—congenital scoliosis, (3) congenital scoliosis, defective development of half the 5th dorsal vertebra, (4) spina bifida occulta, 4th lumbar vertebra, (5) congenital club-hand, (6) unusual type of tuberculous hip disease, (7) scoliosis in a boy due to shortening of one leg of which the bones show a condition resembling fibro-cystic disease, (8) tuberculous arthritis of ankle joint.

Dr. Reginald Morton showed the following skiagrams, (1) large aneurysm of arch of aorta, male, æt. 41, to illustrate radiographically Dr. Bernstein's specimen, (2) branched calculus in the pelvis of the right kidney, female, æt. 37, under care of Mr. H. S. Souttar, (3) showing absorption of bodies of the 4th and 5th lumbar vertebræ following an attack of paratyphoid—for comparison with Major W. McAdam Eccles' skiagram showing wedge-shaped vertebræ, male, æt. 30, under the care of Dr. Arthur Saunders, (4) wrist showing changes in bones and joint spaces due to sepsis, male, æt. 28, (5) osteoarthritis of left hip, male, æt. 43, under care of Mr. Tyrrell Gray, (6) rarefying osteitis of upper end of tibia and fibula, female, æt. 37, under care of Mr. O. L. Addison, (7) Pathological dislocation of right hip from tuberculous disease, male, æt. 10, under care of Mr. O. L. Addison, (8) skiagram showing early tuberculous invasion of lungs, striæ and mottling being close in around the hilum—the periphery of the lungs being clear—the detail in this skiagram was extremely fine, and this exhibit gave rise to an interesting discussion in which the President, Dr. Arthur Saunders, Mr. O. L. Addison, Dr. Reginald

Morton, and other members took part, on the value of radiography as a means of detecting pulmonary tuberculosis in its earliest stages, before physical signs make themselves apparent.

The President, Major W. McAdam Eccles, Mr. O. L. Addison, Mr. H. Tyrrell Gray, Dr. Arthur Saunders, Dr. Percy Potter, Mr. Rickard Lloyd, Dr. J. M. Bernstein, Dr. Reginald Morton, and others discussed the various specimens and skiagrams shown at the meeting.

NORTH OF ENGLAND OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

Meeting held January 21st, 1916.

The President, Dr. Willett, in the Chair.

Owing to the continuance of the war, it was resolved :—

(1) That the present officers be re-elected for the year 1916.

(2) That no meeting of the Society be held until the annual meeing in January, 1917, unless the course of events altered and made it desirable to hold one in October.

(3) That the annual subscriptions be not collected while the Society discontinues its meetings.

Mr. Carlton Oldfield (Leeds) exhibited a specimen of

RETAINED MENSES IN ONE HALF OF A DOUBLE UTERUS

The patient had severe abdominal pain, suggestive of appendicitis, and it was only when the abdomen was opened it was discovered that the uterus was double, and one side much distended with retained menses owing to an absence of an os on that side. The vagina did not possess a septum.

Dr. W. E. Fothergill (Manchester) opened a discussion on the "Notification of the so-called Puerperal Fever." It was pointed out that though Semmelweis showed before 1850 that there was no such infectious disease as "puerperal fever," the continued use of the term in the registration of deaths and under the Notification of Infectious Diseases Act had kept up the idea that such a disease existed. But though births, deaths and marriages might be counted, it was no more possible to enumerate cases of puerperal pelvic infection than it was to enumerate cases of wound infection in general. The official figures for 1912, for example, showed that in Liverpool 78 per cent. of cases notified as puerperal fever were fatal, while in Manchester only 16.3 per cent. of the cases notified as puerperal fever died. Such a discrepancy was enough to show that the notification of so-called puerperal fever is a farce. It had never done any good, for the reduction of the late years in the mortality from puerperal fever was due to the education of doctors, midwives and the public in clean midwifery, just as the reduction of deaths from wound infection was due to clean surgery and not to notification.

The paper was discussed by Drs. Scott, Donald, Oldfield, Shaw, Grimsdale, and the President.

Dollis Hill House, Willesden, where Gladstone stayed frequently when Prime Minister, has been opened as a military hospital.

Mr. William Farrer Ecroyd, of Credenhill Court, near Hereford, and Whitbarrow Lodge, Westmoreland, lord of the manor of Credenhill, M.P. (Conservative) Preston 1881-5, left £500 to the Victoria Hospital for Burnley, £250 to the Hereford General Hospital, and £100 each to the British Hospital and Home for Incurables and Cancer Hospital, Brompton.

OBITUARY.

DEPUTY INSPECTOR-GENERAL TRIMBLE, L.R.C.S.I.

Deputy Inspector-General James Trimble, late of the Royal Navy, has died at Merstham, Surrey, in his 79th year. Qualifying L.R.C.S.I. in 1858, he joined the Naval Service, and was employed during the naval and military operations in the Eastern Sudan in 1884, obtaining mention in despatches and receiving the medal and the Khedive's bronze star. He retired in 1893 as a Deputy Inspector-General of Hospitals and Fleets.

SURGEON LIEUT.-COL. A. J. BELEMORE, M.R.C.S., L.S.A.

Surgeon Lieut.-Col. Alfred John Belemore has died at Brighton in his 77th year. He qualified M.R.C.S. and L.S.A. in 1861, and in the following year entered the Army Medical Service as a Surgeon to the Royal Artillery. He had been on the retired list since 1883.

DR. F. T. B. LOGAN, L.R.C.P. AND S.Ed., M.R.C.S.Eng., BRISTOL.

The death of Dr. F. T. B. Logan, of Eastfield, Southville, Bristol, occurred suddenly on February 7th. During the day he had attended his patients as usual, and in the evening he was taken ill and died in a few hours. Dr. Logan, who was in his 58th year, was born at Kettering, in Northamptonshire, and was educated at the Bristol Grammar School. Upon leaving, he joined the Bristol Medical School, and attended the General Hospital, where he won the Lady Haberfield Scholarship, the Clarke Surgical Scholarship, and the Lady Haberfield Pathological Prize. Subsequently he went to Guy's Hospital, London. He took the degrees of M.R.C.S.Eng. (1879), L.R.C.P.Edin. (1880), and L.M.Edin. Upon qualifying, he settled down to practise in Bedminster, and continued to reside in the district up to his death. For 14 years he was Medical Officer of the Bristol Sanitary Fever Hospital. He was Surgeon to the Post Office, and was actively concerned in the administration of the National Insurance Act. Upon the outbreak of war he threw himself with characteristic energy into the heavy work which has fallen upon the profession, both in the matter of the examination of recruits and the cure and treatment of the wounded. It may be mentioned that he lost his eldest son when serving as a volunteer in the South African War, and that both his remaining sons joined the Army (in which they hold commissions) soon after the present war broke out.

REVIEWS OF BOOKS.

BANDAGING. (a)

This small work appears at a time when nearly everybody is trying his or her hand at the art of bandaging. To all of those who wish to make themselves expert at this branch of surgery we can thoroughly recommend Captain Fitzwilliams' book as a practical, clearly written, and helpful work.

In the first part he adequately describes the method of application of the roller bandage to the various parts of the body. The uses of the triangular or military bandage are ably and clearly dealt with. There is also much useful information about special bandages and plaster strapping. We regret that the author has omitted a description of the "St. John arm sling" in this otherwise comprehensive little work. We are indebted to the pencil of a Hungarian prisoner of war for the illustrations, which show a refreshing change from the usual drawings of our text books. The frontispiece—a figure of the

(a) "A Practical Manual of Bandaging." By Duncan C. L. Fitzwilliams, Captain, R.A.M.C. (T.). Demy 8vo. Pp. viii. and 92. One plate, 140 figures in text. London: Bailliere, Tindall and Cox. 1915. Price 3s. 6d.

German Crown Prince with his foot in a sling—is particularly entertaining, especially when we remember the nationality of the artist. We feel sure that this book will prove helpful not only to beginners, but also to those of us who have grown somewhat rusty in the art of bandaging.

ST. BARTHOLOMEW'S HOSPITAL. (*a*)

Founded by Rahere in 1137, for nearly eight hundred years St. Bartholomew's Hospital has ministered to the wants of the sick and wounded of the City of London. The hospital has become part and parcel of that great city, sharing in its benefits and ministering to its wants in troublous times, and after the long life of eight hundred years is, if possible, more vigorous than ever. Like a true *alma mater*, "Bart's" seems to inspire her children with a warm affection for her, but never, we believe, has she had a son who was more intimately acquainted with her history than Norman Moore. In his Rede Lecture he gives us a glimpse at the doings of St. Bartholomew's in peace time and in war time throughout her long history, and shows us how she is at present worthily maintaining her ancient tradition. We accept this lecture gratefully, but we hope that Dr. Moore does not think that we shall be satisfied with it as a substitute for his long-promised history of the hospital.

Medical News in Brief.

Royal Medical Benevolent Fund.

The annual general meeting of the members of the Royal Medical Benevolent Fund was held at 11 Chandos Street, Cavendish Square, Sir John Tweedie presiding. The book value of the securities was reported to be very nearly £100,000. This yielded £3,600 per annum, which was devoted to the support of the annuitants. Miss Jenkins-Brown was appointed an additional member of the Committee. On the motion of Sir William Church, Sir John Tweedie was re-elected President. Dr. Samuel West was re-appointed Hon. Treasurer, and Dr. C. Newton Pitt Hon. Secretary.

Harveian Society of London.

A meeting of this Society will be held on Thursday, Feb. 24th, at the Stafford Rooms, Titchborne Street, Edgware Road, at 8.30 p.m., when a discussion will take place on the "Treatment of Gunshot Wounds," to be opened by Sir Berkeley Moynihan, and continued by Mr. D'Arcy Power, Mr. Burghard, Mr. Percy Sargent, Mr. Clayton-Greene, Dr. Fleming, and others. The meeting promises to be a very interesting one, and the President and Council cordially invite all members of the profession to be present, who may be desirous of hearing the discussion.

Glasgow Royal Infirmary.

The report of the managers of the Glasgow Royal Infirmary draws attention to the fact that the capital fund has for the second year in succession been seriously encroached upon to meet, along with the combined ordinary and extraordinary revenue, the year's expenditure. The maintenance and administration charges amount to over £5,000 per month, while the ordinary income amounts to little more than one-half of that sum. Even after applying the sum of £13,070 9s. 11d. (the net amount received during the year by way of legacies, donations, etc.), it has been necessary to withdraw the sum of £15,428 18s. 10d. from capital account. The position, it is pointed out, is becoming sufficiently alarming to call for speedy remedy. The capital funds of the infirmary, already greatly reduced by the contribution to reconstruction expenditure, are being further depleted instead of being, as was hoped, increased, and the very life of the institution as a voluntary hospital is now threatened. The managers therefore earnestly appeal for a further and largely increased financial support to the extent of at least an additional £30,000 per annum. The ordinary expenditure of £61,750 6s. 10d. was £3,704 9s. 9d. in excess of the previous year. This is accounted for by the larger number of indoor patients treated and the higher cost of provisions, coal, drugs, etc. The managers continued during the year to place at the disposal of the naval and military authorities 150 beds for sick and wounded sailors and soldiers, and these have been more or less continuously occupied during the year without interfering with the ordinary work of the institution. Practically all the members of the medical and surgical staff have been doing military duty. Thirty-eight hold commissions in the Royal Army Medical Corps and twelve are engaged in Red Cross hospitals.

The Royal Sanitary Institute.

On March 9th, at 4.15 p.m., at 90 Buckingham Palace Road, a discussion will take place on "Food Inspection, Standards of Purity for Food Supply in War Time, and the Utilisation of Condemned Stores," to be opened by J. Wright Mason, M.B., D.P.H., Medical Officer of Health, Hull. The chair will be taken by Sir William J. Collins, K.C.V.O., D.L., J.P., M.D., M.S., Vice-President. The following will take part in the discussion:—R. King Brown, M.D., D.P.H., M.O.H., Bermondsey; W. J. Howarth, M.D., D.P.H., M.O.H., City of London; H. R. Kenwood, M.B., D.P.H., M.O.H., Beds. C.C. and Stoke Newington; W. Perrin Norris, M.D., D.P.H., Chief Medical Officer, Australian Commonwealth Medical Bureau; Samuel Rideal, D.Sc., F.I.C., J.P.

Royal Society of Medicine—Section of Odontology.

A debate on "War Injuries of the Jaws" will be held on Monday, February 28th, at 5.30 p.m. An exhibition of dental splints, models, radiograms, photographs, and other apparatus illustrating the same subject will be open from Tuesday, February 22nd, to Monday, February 28th. Anyone wishing to exhibit is asked to send in full particulars addressed to the Hon. Secretary, Section of Odontology, Royal Society of Medicine, 1 Wimpole Street, W., who will return them to their owners immediately after the close of the exhibition.

Royal Medical Benevolent Fund Guild.

The annual general meeting of the Guild will be held at the Mansion House on Monday, February 21st, at 3.30 o'clock. The Right Hon. the Lord Mayor will preside. The speakers will include the following:—Adeline, Duchess of Bedford, Mrs. Scharlieb, M.D., M.S., Dr. Louisa Garrett-Anderson, Sir Arthur May, K.C.B., Sir John Tweedy, LL.D., James Campbell McClure, Esq., M.D.

Irish Medical Schools' and Graduates' Association.

We are informed by Dr. Shepherd Boyd, of Harrogate, Prov. Hon. Secretary, Irish Medical Schools' and Graduates' Association, that the final selection for the Arnott Medal took place last week in London. The Council had the greatest difficulty in making the selection from so many brave candidates, but after deliberate consideration the medal was awarded to Captain W. M. Loughman, R.A.M.C., R.C.S.I.

Birmingham Hospital Unit for the Front.

Lieut.-Col. Gilbert Barling has been authorised by the War Office to raise in the Birmingham district a medical staff for a hospital unit of 1,040 beds for service abroad, probably in the East. The hospital is urgently needed, and a staff of thirty doctors, excluding the commanding officer and quartermaster, are required, and practically the full number has been secured. The Committee of the General Hospital have given permission to three members of their staff to joint the unit, and most of the other doctors are in practice in Birmingham. A few of the members of

(*a*) "St. Bartholomew's in Peace and War." The Rede Lecture, 1915. By Norman Moore, M.D., Consulting Physician to St. Bartholomew's Hospital. 8vo, pp. 56. Cambridge: At the University Press. 1915.

the new hospital staff are drawn from outside the immediate Birmingham area, but nearly all of these have either been educated at the Medical School in Birmingham or have formerly held appointments in the city, and for that reason were anxious to join. Had circumstances permitted, Lieut.-Col. Barling would probably have accompanied the unit, but his other duties in the city, and particularly his position as Vice-Chancellor of the University, which is surrounded by many difficulties at the present time, have prevented him from going abroad. It is understood that a commanding officer will be appointed from the regular R.A.M.C. The new hospital is purely a Government service unit, and does not involve any local financial responsibility.

Medical Scholarships.

Fourteen medical entrance scholarships and exhibitions, of an aggregate value of about £1,200, tenable in the Faculties of Medical Science of University College and King's College, and in the Medical Schools of Westminster Hospital, King's College Hospital, University College Hospital, and the London (Royal Free Hospital) School of Medicine for Women, will be offered for competition on Tuesday, July 18th, 1916. Particulars and entry forms may be obtained from the Secretary of the Board, Mr. J. F. Hales, M.A., King's College, Strand, W.C.

The Morphine Habit.

With a view to checking the habit of laudanum drinking, the Council of the Pharmaceutical Society has passed a resolution to the effect that all preparations of opium containing 0.75 per cent. of morphine (roughly 3½ gr. in the ounce) should be added to Part I. of the Poison Schedule. Hitherto the sale of preparations containing less than 1 per cent. of morphine has only been subject to minor restrictions, and old-fashioned laudanum, for which there is still a demand among opium *habitués*, escaped the more stringent regulations. It will now be illegal for chemists to sell it to any person who is not personally known or introduced to them, and the buyer will have to sign the poison book.

Tuberculosis at Wednesbury.

At the quarterly meeting of the Wednesbury Town Council on February 7th, the Medical Officer of Health referred in his report to the very marked prevalence of tuberculosis, to which no less than 20 per cent. of the mortality was attributable. This constituted a most regrettable state of things, especially when it was observed that the incidence of deaths was mainly amongst persons below middle age, and therefore at the period of greatest activity and usefulness. Such figures afforded little support to the claims advanced on behalf of the more recent method of treatment, or, at any rate, suggested that the cases for the most part did not come under thorough treatment in the early stages.

Dundee Municipal Sanatorium Opened.

Ashludie Sanatorium, Monifieth, was formally opened on February 9th. The sanatorium, which is part of Dundee Town Council's scheme for the treatment of tuberculosis, has cost about £24,000, of which sum the Treasury will bear a considerable part, and affords accommodation for 64 incipient cases of the disease.

Protection from X-rays.

At the meeting of the Röntgen Society on February 1st a discussion took place on the subject of protective devices for X-ray operators. Dr. Sidney Russ pointed out that although X-ray dangers were becoming less formidable, owing to the more general knowledge of the peril, yet at the same time the neglect of precautions was all the more serious on account of the increasing power of X-ray outfits. The X-ray outfit of the most modern type was capable of fifty times greater power than the ordinary outfit of ten years ago. He thought that X-ray workers would prefer not to invoke legislation on this subject if sufficient protection could be obtained by other means, for of all the methods available for ensuring it, legislation would be the least popular and the least convenient. He and other speakers suggested that certificates of safety should be given with X-ray apparatus.

Abilities and Character of Doctors.

At a meeting of the Staffordshire Insurance Committee on February 5th, attention was called to a recommendation appointing two doctors to the panel list, and inquiry was made if any means were taken to ascertain the abilities and character of these men.

The Clerk said if a doctor was on the Medical Register he was entitled to go on the panel.

Replying to Dr. Shufflebotham, as to one of the doctors mentioned, the Clerk said he was already on the panel, and the reason for a fresh application was that he had gone to another district, and a new contract had been made.

It was moved that the name in question should be referred back for further consideration, but the Chairman declined to accept it because of the ruling given by the Clerk.

Austria's Need for Army Doctors.

The Austrian War Office has just ordered all doctors, whether specialists or not, who are physically fit for service at the front, to be enrolled as army doctors. The only medical men allowed to undertake civilian practice are those who are physically unfit for service at the front Apparently thousands of sick and wounded fail to receive proper attention owing to the scarcity of medical men. The hospitals are complaining that they cannot procure numerous requisites, particularly indiarubber gloves.

Medical Officer's—Appointment by Guardians against L.G.B. View.

Notwithstanding an intimation that the Local Government Board's view is that such vacancies should not be permanently filled, the Stockport Board of Guardians, on February 7th, decided to appoint Dr. J. Howie Smith as Medical Officer of the Workhouse and Stepping Hill Hospital, in succession to the late Dr. Barker Bale.

Mr. Sharples, who had given notice to move the appointment of Dr. Smith, who has acted as deputy for 15 years, declined to withdraw his motion, and said it was in the best interest of the nation that the appointment should be made now.

It was argued by several speakers that the medical men serving with the forces were not being given a chance of the appointment.

An amendment to postpone the appointment during the war was defeated, and the resolution was carried by 18 votes to 12.

Health of Hampstead.

In his report to the Hampstead Borough Council on February 3rd, Dr. F. E. Scrase, the Medical Officer of Health, stated that during the six weeks ended January 8th, 97 births were registered in the borough. The birth-rate was 9.7 per 1,000 per annum of the population, as compared with the rate of 13.1 per 1,000 of the population during the corresponding period of last year. 135 deaths were registered, of which 49 were of non-resident persons. The deaths of 25 Hampstead residents which took place outside the borough were also registered during this period, the total deaths belonging to Hampstead being 111. The death-rate was 11.1 per 1,000 per annum of the population, as compared with a rate of 12.0 per 1,000 of the population during the corresponding period of last year.

London Fever Hospital.

A successful year's work, under rather stringent financial conditions, was presented in the report of the London Fever Hospital at the annual meeting held on February 10th, under the presidency of Lord

Balfour of Burleigh. Mr. Muir Mackenzie mentioned that there was a deficit on the year of rather over £1,000. Considering, however, the diminished receipts, increased wages, and the extortionate prices of some drugs, there was reason for congratulation that the deficit was not larger. Legacies dropped to £200, as compared with nearly £2,000 in the previous year.

The annual report, presented by Captain Box, M.D., stated that the chief feature of the cases treated was the notable increase in measles and German measles.

Dr. Sidney Phillips remarked on the change in diseases mentioned now as compared with the records years ago. Since he was connected with the hospital typhus had disappeared from the records, while cerebro-spinal fever had taken its place, and quite recently Nigerian fever had been diagnosed. The number of cases of German measles had arisen from the aggregation of large numbers of recruits in camps. There had been a good deal of discussion as to whether the disease should continue to be called German measles, but a change in name would not reduce liability to infection.

Lord Balfour of Burleigh said that the number of patients treated in the hospital last year was 1,059, a larger number than in any year since 1882. One reason was that the hospital was taken advantage of by people who did not wish to go to an ordinary hospital and "sponge" upon the public, but who could not afford to go to a nursing home. That was the direction in which the hospital was doing the greatest public service. They had treated, not only soldiers in training for the front, but several who had returned wounded and were suffering from infectious diseases. Last year there had been a falling off of £117 in subscriptions. It was not very large in relation to the whole, but he thought an institution like this should be one of the last to suffer when expenses were cut down. The new wing which had been built would tend to the efficiency of the hospital, and the fact that they had had this extra expense gave an additional plea for kindly consideration by those who were making large war profits.

London Ambulance Stations.

In connection with the London County Council, ambulance service stations have been established as follows:—A, Fulham, 239, North End Road, W.; B, Bloomsbury, 15, Herbrand Street, Tavistock Place, W.C.; C, Shoreditch, 5, Montclare Street, Bethnal Green, E.; D, Lee, 142, High Road, Lee, S.E.; E, Brixton, 5, Buckner Road, Brixton Hill, S.W.; and F, Elephant and Castle, 15 St. George's Market, London Road, S.E.

British Hospital for Corfu.

With a large part of the Serbian army now established at Corfu, the question of hospital accommodation has become one for serious consideration. The Chairman of the Serbian Relief Fund has received a cable from Corfu informing him that the French and Serbian authorities there would welcome the establishment of a British hospital. Accordingly arrangements have already been made by the Serbian Relief Fund to despatch such a hospital (the seventh hospital organised by the Serbian Relief Fund) to Corfu, and Mr. E. P. Warren, F.S.I., F.R.I.B.A. (a brother of the President of Magdalen), has been appointed administrator.

MEDICAL WAR ITEMS.

The death in action has been announced of Capt. Seymour Stritch, 6th Battalion Connaught Rangers, who before the war was a medical practitioner in Dublin. Dr. Stritch was a native of Dublin, and obtained the conjoint qualifications of Scotland in 1895. Having spent some time in asylum work in Scotland, he settled in Dublin. He was for a time Governor of the Apothecaries' Hall of Ireland, and he was a magistrate for the county borough of Dublin. During the struggles arising out of the National Insurance Act he took a line different from that of the great bulk of the profession, and as a consequence many professional friendships were broken. Now that these struggles are at an end many of his old friends looked forward to renew these ties, but it has been ordered otherwise. When the war broke out he accepted a commission in the Durham Light Infantry, from which regiment he afterwards transferred to the Connaught Rangers. His death occurred in action in Flanders on February 7th.

Lieutenant Francis Gethin Hopkins, M.D., Royal Army Medical Corps, who has died at Plymouth, was formerly Principal Medical Officer of the Gold Coast Colony. He was a B.A., Dublin, and an M.D., 1903, and he had held professional appointments at the Liverpool Infirmary and the Liverpool City Fever Hospital. Lieutenant Hopkins, who was gazetted temporary lieutenant in the R.A.M.C. in September of last year, was the son of the late the Rev. John Wright Hopkins, Ahern Vicarage, Fermoy, Cork.

Lieut. George Dewar, M.B., Royal Army Medical Corps, killed in France, was the second son of the late Mr. David Dewar, of Aberdeen. While serving as a corporal at Bedford he obtained permission to return home to complete his medical course at Aberdeen University. After graduating with distinction he obtained a commission, and was almost immediately sent to the front. At Aberdeen University Lieut. Dewar, who was 23 years of age, won much distinction in athletics, being a good Rugby footballer and cricketer.

Lieut.-Col. William Moyle O'Connor, M.D., 6th London Field Ambulance, Royal Army Medical Corps, who has died on service, always took a keen interest in the medical work of the Services. He was formerly a major in the R.A.M.C., and he was gazetted an honorary major in the Army in April, 1903, while in March, 1913, he took up his commission as lieutenant-colonel of the 6th London Field Ambulance. He received his medical education at University College, King's College, London, and Trinity College, Dublin. He graduated an M.B., B.Ch.Dub., 1887, and M.A., M.D., 1897. Amongst the appointments held by him were those of Examiner and Lecturer to the St. John Ambulance Association and Medical Officer to the Actors' Association. He was also on the staff of Meath Hospital and Physician to the Aldershot Hospital. Among his works was "The Army Medical Reserve Difficulty," which appeared in 1905. Col. O'Connor was was of the military members of the Territorial Force Association of London.

Lieut.-Col. John Wilfred Stokes, R.A.M.C. (T.R.), 3rd West Riding Field Ambulance, has died at Latchmere Ham, as the result of shell-shock in France. He was the eldest son of the Rev. Arthur and Mrs. Stokes, formerly of Musoorie, U.P., India, and was 43 years of age.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer not necessarily for publication, but as evidence of identity.

THE WEST COUNTRY SCORES.

IN 1915, of towns with population over 200,000, Bristol and Plymouth were the most sober.

EMBRYO (Leeds).—We have considered our correspondent's suggestion, but regret to say that, at the present time, a favourable reply is impossible.

A COUNTRY PRACTITIONER.—Application should be made direct to the War Office, and the question submitted to the Director-General of the Army Medical Service.

TEESDALE GUARDIANS AND VACCINATION.

REPORTS presented at a meeting of the Teesdale Guardians at Barnard Castle showed that a large number of children in the district were not vaccinated during 1914.

Mr. H. L. Fife: It is very lamentable that such numbers of children should be left like that.

The Chairman (Mr. John Smith): A great many people seem to think they know what to do better than the doctors.

S. C. L. (London).—The course suggested is not one which we should advise. Our correspondent should consider the matter more from a diplomatic point of view.

IGNOTUS (Barnstaple).—Our correspondent is thanked for his communication, which shall receive notice.

AMBIGUOUS.

A STORY is told of a man in the North of London who had been invited to enlist, and who wrote as follows to the local recruiting committee:—

"I do not feel I ought to leave my wife while there are any single men left at home in this district."

JUMBO (Rotherhithe).—Dr. Howarth, Medical Officer for the City of London, in a report to the Corporation, mentions that in 1907 the percentage of tuberculous milk in the County of London was 12.9. Last year it had been reduced to 4.2.

PUNISHMENT FOR ILLEGAL OPERATIONS.

MR. JUSTICE LOW, at the Central Criminal Court, in sentencing a woman to 12 months' hard labour for performing an illegal operation, said he thought that in the future, having regard to the condition of the country, these offences were very likely to meet with even more severe punishment than they had done in the past.

X. L. (Forfar).—The report states that in 1915 1,289 deaths were caused by accidents in the coal mines of the United Kingdom, an increase of seventy on the total for 1914.

SIR OSWALD MOSLEY'S DESIRE.

SIR OSWALD MOSLEY, of Burton-on-Trent, who died on October 10th last, in his will directs that his body is not to be screwed down in the coffin until a doctor has opened the veins in his neck and had certified the cause of death, and an open bottle of chloroform placed in the coffin.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, FEBRUARY 16TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF THE HISTORY OF MEDICINE) (1 Wimpole Street, W.—5 p.m. (Books, MSS., etc., on view at 4.30 p.m.): Papers:—Mr. C. E. Wallis: Marat. Mr. Percy Dunn: An Oculist of XVI. Century (Andreas Laurentius). Dr. Dan McKenzie: Folk Cures by Constriction and Rings, with a digression into the Nature of the Soul. Dr. C. G. Cumston (Geneva): Portrait of Paracelsus.

THURSDAY, FEBRUARY 17TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF DERMATOLOGY) (1 Wimpole Street, W.).—5 p.m.: Exhibition of cases (at 4.30 p.m.).

FRIDAY, FEBRUARY 18TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF OTOLOGY) (1 Wimpole Street, W.).—5 p.m.: Cases and Specimens will be shown by Mr. Sydney Scott, Dr. Dan McKenzie, Mr. Mollison, and others. Short Communication:—Dr. Dan McKenzie: Otogenic Facial Paralysis.

ROYAL SOCIETY OF MEDICINE (SECTION OF ELECTRO-THERAPEUTICS) (1 Wimpole Street, W.).—8.30 p.m.: Clinical Meeting. Cases will be shown, also skiagrams and new apparatus.

MONDAY, FEBRUARY 21ST.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—9 p.m.: The Second Lettsomian Lecture will be delivered, on "The Effects of High Explosives on the Central Nervous System," by Major Fred. W. Mott, M.D.Lond., Hon. M.D.Edin., F.R.S.

Vacancies.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Castlenock (Dublin), Glaslough (Monaghan), Llanberis (Carnarvon), Aghadowey (Londonderry), Clackmannan (Clackmannan), Lyndhurst (Hants.), Newbridge (Kildare), Sedburgh (Yorks., West Riding).

Leeds Public Dispensary.—Lady Resident Medical Officer. Salary £130 per annum, with board, residence and laundry. Applications to the Secretary of the Faculty, Public Dispensary, North Street, Leeds.

The Royal Infirmary, Sunderland.—Lady House Surgeon. Salary £150 per annum, with board, residence and laundry. Applications to Thomas Robinson, Secretary.

Royal Albert Hospital, Devonport.—House Surgeon. Salary £150 per annum, with board and laundry. Applications to the Chairman of the Selection Committee, Charles W. Dickinson, Capt. R.N., Hon. Secretary, Royal Albert Hospital, Devonport.

Baguley Sanatorium for Treatment of Tuberculosis, Manchester. Second Assistant Medical Officer. Salary £250 per annum, with board and residence. Applications to the Chairman of the Hospitals Sub-Committee, Public Health Office, Civic Buildings, 1 Mount Street, Manchester.

London Lock Hospital, Dean Street, Soho, W.—House Surgeon. Salary £150 per annum. Applications to Henry J. Eason, Secretary.

West Ham Union.—Assistant Medical Officer. Salary £300 per annum. Applications to Thomas Smith, Clerk, Board Room, Union Road, Leytonstone, N.E.

Coventry and Warwickshire Hospital, Coventry.—Third Resident. Salary £175 per annum, with rooms, board, laundry, and attendance. Applications to John A. Rudd, Secretary.

Salford Royal Hospital.—House Physician. Salary £250 per annum with board and residence. Applications to George Ruddle, Secretary and Superintendent.

Salford Royal Hospital.—House Surgeon. Salary £200 per annum with board and residence. Applications to George Ruddle, Secretary and Superintendent.

Appointments.

ARMSTRONG, HUBERT, M.D.Vict. and Liverpool, Captain R.A.M.C. (T.), Honorary Physician, Liverpool Infirmary for Children, *vice* N. P. Marsh, M.B., M.R.C.S. (deceased).

BULL, G. V., M.B., B.C.Cantab., Certifying Surgeon under the Factory and Workshop Acts for the Hoddesdon district of the County of Hertford.

CURL, S. W., M.D.Cantab., M.R.C.P.Lond., Consulting Physician to the Clacton Cottage Hospital, *vice* Eustace Smith, M.D. (deceased).

WILLOUGHBY, W. M., M.D.Camb., D.P.H., Medical Officer of Health for the Port of London, *vice* Herbert Williams, M.D.Lond. (deceased).

Births.

FRASER.—On February 12th, at 75 Shooter's Hill Road, Blackheath, to Dr. and Mrs. A. Fraser—a son.

GOOD.—On February 9th, at The Hurst, Harborne, Birmingham, to Dr. and Mrs. Percy Good—a daughter.

MOORHEAD.—On February 7th, at South Godstone, Surrey, the wife of R. L. Moorhead, M.B., C.M.—a son.

PHILLIPS.—On February 12th, at Bethlem Royal Hospital, London, to Dr. and Mrs. Porter Phillips—a son.

PLATTS.—On February 12th, at 59 East Sheen Avenue, S.W., to the wife of Sydney Goodman Platts, M.B., a daughter.

SUTTON.—On February 12th, at 27 Clarendon Road, Southsea, the wife of Captain E. A. Sutton, Royal Army Medical Corps, of a son (stillborn).

Marriages.

BARRETT—WILLEY.—On February 10th, by special licence, Sir W. F. Barrett, F.R.S., of Kingstown, Ireland, to Dr. Florence Willey, of 31 Devonshire Place, W.

IRVINE-FORTESCUE—BODDINGTON.—On February 5th, at St. James's, Piccadilly, London, Captain Archer Irvine-Fortescue, Royal Army Medical Corps, eldest son of Dr. William Irvine-Fortescue, J.P., and of Mrs. Irvine-Fortescue, of Kingcausie, Kincardineshire, to Ruth Olive, eldest daughter of Henry Boddington, J.P., and of Mrs. Boddington, of Pownall, Wilmslow, Cheshire.

JEFFREY—PAGE-ROBERTS.—On February 10th, at Strathfieldsaye, John Jeffrey, M.B., F.R.C.S.E., Jedburgh, to Cicely Frederica, daughter of the Rev. F. Page-Roberts, M.A., Rector of Strathfieldsaye.

PASCO—ROBY.—On February 12th, at St. Matthew's Church, Upper Clapton, Bernard Charles William Pasco, M.R.C.S., L.R.C.P. (Lieut., R.A.M.C.), son of Mr. and Mrs. William John Pasco, of Mill Hill, Middlesex, to Annie, daughter of Mr. and Mrs. George W. Roby, of Stamford Hill, N.

PEARSON—EARL.—On February 14th, at St. Augustine's, Norwich, Dr. S. V. Pearson, of Mundesley, to May Elizabeth, youngest daughter of Mr. and Mrs. Earl, of Norwich.

ROBINSON—HAWKES.—On February 3rd, at Christ Church, Corning, N.Y., Dr. E. H. Robinson, of Toronto, to Alice Luella Hawkes, of Inniscarra, Co. Cork.

Deaths.

CHARLESWORTH.—On February 8th, at "White Lodge," 66 Upper Richmond Road, East Putney, George Henry Charlesworth, M.D., J.P., aged 56.

MIDDLETON.—On February 7th, at 152, Bruntsfield Place, Edinburgh, Dr. Robert William Middleton, aged 63.

SAUNDERS.—On February 11th, at Staines Lodge, Staines, Fredk. Herbert Saunders, M.D., eldest son of the late Lieut. Frederick Saunders, aged 67.

WALKER.—On February 7th, at Hurworth-on-Tees, Charles Edward, M.D., C.M.Edin., M.R.C.S.Eng., beloved husband of Annette Curtis Walker, in his 60th year.

WILLIAMS.—On February 12th, Dr. T. Hammond Williams, Oswestry, aged 56 years.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

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AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravants les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

A Letter to the "Times."

AT the beginning of last week, the following letter appeared in *The Times*: "All those who have any acquaintance with the subject will agree with Sir Alexander Ogston that 'the supply, from civilian sources, of medical officers for the Army is nearly exhausted,' and there is a growing feeling in the profession that the time has come when the War Office should mobilise all medical men, irrespective of age, and should enrol them with a view to utilising the part-time services for military work at home of those who are unable, either from age, physical disability, or financial reasons, to offer themselves for commissions in the R.A.M.C. It is believed that the greater part of the military work in this country could be done by such men, most of whom would probably be glad to give their help gratuitously, and that this would set free for service abroad many whole-time men who at present are employed in attendance on sick and wounded soldiers in the United Kingdom. Steps are now being taken to bring such a plan to the notice of the medical profession in London, and should it meet with general approval it is hoped that it may be adopted by the military authorities. The Emeriti of whom Sir Alexander Ogston speaks would then have the opportunity of doing useful work for the Army without any great interference with the services which they are already rendering to the civilian community and with very great saving to the finances of the nation." This was signed by two opulent general practitioners of Belgravia, Dr. Barcroft and Dr. Sydney Beauchamp, a distinguished physician, Dr. Robert Hutchison, and a well-known laryngologist, Mr. Seecombe Hett, none of whom, on the face of things, is in the least likely to have any real knowledge of how the war is affecting the rank and file of the profession.

A Sequel.

A few days later the following appeared, to which the names of the same curious quartette were appended: "With reference to our letter which you were kind enough to publish in your issue of February 14th, we desire to state that we have had an opportunity of putting our views before Mr. Tennant and the Central Medical War Committee, both of whom received us most courteously and sympathetically. It now seems to us desirable to postpone further steps towards securing more general service from the medical profession until the Central Medical War Committee's canvass for enrolment is completed." It seems a pity that these views, before being submitted to Mr. Tennant and the Central War Committee, were not submitted to the profession. If they had been, it is quite certain that their sponsors would not have been received "sympathetically," and, I fear, not very "courteously." But what on earth were these four humorists thinking about when they addressed their first letter to Printing House Square? It would be difficult to imagine a communication more completely out of harmony with the attitude of the vast majority of the profession towards the needs of the present crisis, and the way in which those needs should be met. It may well be that Sir Alexander Ogston is correct in believing that "the supply, from civilian sources, of medical officers for the Army is nearly exhausted," but that is not surprising in view of the notorious fact that the military authorities have been outrageously wasteful of those already enrolled. No semblance of a case has yet been made out for still further depleting the ranks of the medical men who remain available for the requirements of the civilian population.

The Real Solution.

IN the opinion of the great majority of the profession, the solution of the present difficulty is to be found, not in the pressgang, but in efficient organisation. "S.O.S," who sends a spirited contribution to the present issue, wrote an article which appeared in the MEDICAL PRESS AND CIRCULAR as long ago as May 26th, 1915, entitled "Economise Your Medical Material." With real foresight he then pointed out the direction in which the military authorities were drifting, and pleaded for prompt and intelligent organisation. But the same policy of muddle and meddle which he then deplored has ever since continued to characterise the management of the medical side of military matters, with the result that we are now threatened with the "mobilisation of all medical men irrespective of age." It is inconceivable that

the members of the profession will tamely submit to so unnecessary and indefensible a course. In view of the sacrifices which have been and are still being uncomplainingly made, it would be nothing short of an outrage.

The Smoky Fire.

The Central Medical War Committee has doubtless done its best to outgrow and disavow its sinister parentage, but it remains altogether unrepresentative and uninfluential, and, seemingly, quite unmindful of the medical situation as a whole. It appears to accept without any inquiry Sir Alfred Keogh's panic-begotten estimates of the military requirements, and hysterically seeks to supply these requirements without the slightest reference to the demands and interests of the civil population. Sir Alfred continues to cry "More, more," and the Central War Committee crouchingly harkens to his cry, without asking in return for any guarantee, either that the men are really wanted or that when obtained they will be suitably and economically employed. First-class surgeons are still in charge of typhoid wards; expert anæsthetists are still airing their heels in field ambulances at home; skilful physicians are still sighing over trench-feet; and all are spending most of their time in congenial and uplifting clerking. Were the present R.A.M.C. officers properly organised and suitably and economically employed, there would not be the slightest danger of the army being understaffed. That the fire is smoking badly is not a good reason for screaming for more coal.

The Facts.

What are the facts? There are in existence about 30,000 practising members of the profession, of whom no less than 10,000 are already under military orders. The actual number expected and demanded by the authorities is 15,000. That is to say, four million soldiers are to get half of the doctors available, and some forty million civilians are to do the best they can with the other half. Of our home doctors, the proportion of men doing more work than their own is, on a very moderate computation, over one-half. Are these overworked men, irrespective of age, now to be mobilised and enrolled? The majority of them are doing much more than their share already; and that is more than can be said for many officers, junior and senior, of the R.A.M.C., here and at the various base hospitals. A good many of the latter declare that they are having "the time of their lives." The four breathless busybodies who addressed themselves to the Editor of the *Times* might have saved themselves the inglorious necessity for climbing down which Mr. Tennant's "courtesy and sympathy" seem to have imposed upon them, had they taken a little trouble to ascertain and digest the facts before making their preposterous proposals. To suggest that "doing useful work for the Army" is compatible with an absence of "any great interference with a practice" is merely to display an ignorance which is the more deplorable that it comes from members of the profession. I wonder if any of the four have ever seen an Army Form, or, having seen one, essayed the diversion of filling it up. If 15,000 medical men are to be taken for the Army and 15,000 are to be graciously allowed to the civil population, where, I wonder, does the Navy come in?

Deaths from Violence.

Dr. W. A. Brend, to whose books on "Death from Violence" I referred last week, writes to me to point out that his case against the verdict of "overlying" rests but very partially on the experience of the S.W. London Coroner's Court. That is perfectly correct. The experience of that Court was dramatic, and as it recalled a bygone controversy, the temptation to select it was too strong to be resisted. Dr. Brend's contention is that a large proportion of deaths otiosely attributed to overlying are really due to natural diseases, chief among which are bronchitis, broncho-pneumonia, convulsions and infantile debility, all of which conditions may to the inexperienced very easily present *post-mortem* appearances which are indistinguishable from those of overlying. Dr. Brend finds evidence for this belief in the fact that deaths attributed to overlying have a marked seasonal variation exactly corresponding with that of the conditions mentioned; that the correlation between overlying and overcrowding, measured by occupants per room, is not nearly so strong as has generally been believed; and that in France and Germany, where all *post-mortems* in cases of unnatural death are performed by expert pathologists, deaths from overlying are very few, an experience which agrees with that noticed on a smaller scale in the South-Western Coroner's district of London under the *régime* of Mr. Troutbeck.

A Bygone Controversy.

The *régime* of Mr. Troutbeck, it will be recalled, was marked by a controversy which was needlessly embittered by that gentleman's singular want of tact. He insisted—and, in the view of a very large number, rightly insisted—that all the *post-mortems* in his Court should be performed by an expert pathologist, and most of this work was handed over to Dr. Freyberger, a very able man and a thoroughly reliable pathologist. The result was a storm of indignation from the local medical practitioners, who, not content with abusing Mr. Troutbeck, caused Dr. Freyberger to be included in the indictment, and suggested that the latter's pathological skill left much to be desired. Had all this happened after the outbreak of war, the pathologist's presumed nationality might have accounted for some of the animus; but it is a much older story, and most of those who then figured in the attack would probably now admit that the discovery of the cause of death from an autopsy is a very delicate matter which is best left to an expert.

"Overlying."

Dr. Brend adds: "The fact is you can practically never prove that a case is one of overlying. The real reason why in the seven years which have elapsed since the Children Act was passed there has not been a single prosecution under the special clause in that Act is that there has not yet been a case in which proof that would satisfy a Court of Law has been forthcoming. What happens is this: the mother wakes up, turns about, and then finds the infant dead by her side. The popular belief that the mother lies right on the top of her child has been created and maintained by the very word 'overlying,' but in point of fact this condition is never met with." These are matters of the very first importance to every practitioner, and their masterly handling by Dr. Brend should ensure a wide popularity for his little book.

Sinapis.

DOUBLE, DOUBLE, TOIL AND TROUBLE.

By S. O. S.

Under the auspices of the Central Medical War Committee, an attempt is being made to coerce the Medical Profession into military service, and it would be well to inquire into the causes which have rendered this course of action possible, and also into the constitution of the so-called Central Medical War Committee.

At the beginning of the war, offers of service from civilians met with scant courtesy from the authorities of the R.A.M.C., as the coffers of supply were filled to overflowing by patriotic volunteers, who were shuffled into posts for which in many instances they were totally unfitted. However, as the result of a surplus of material the R.A.M.C. authorities, who had acted without civilian advice (although there was in existence an advisory Board) congratulated themselves, after the initial deplorable catastrophe, upon their extraordinary efficiency. True, this efficiency was achieved by the employment of five or even ten men where one would have sufficed, and by the relegating of many capable clinicians to duties merely clerical.

Following the increase in the combatant units, the Army authorities became anxious lest the supply of civilian doctors should fail; and in this crisis they appealed to the British Medical Association. This body having deservedly lost the support of a large number of the profession, cast itself into the mould of the Central War Committee, and instead of advising the Director-General as to the best means of meeting the situation, assumed the office of an executive body, and bombarded the profession with forms and threats, insisting that every medical man up to the age of 45 should enrol as a candidate for a commission in the R.A.M.C. without respect for or discrimination as to the particular qualities possessed by the individual. Moreover, legislation has been threatened whereby all medical men up to the age of 45 will be "conscripted" into the Army if this original appeal fails in its object. The time has come both to question the equity of these proceedings and the authority from which these edicts have emanated, and to consider whether other and better means may not be substituted for them. It will need little argument to show that Parliamentary coercion of a section of the community in this connection will be grossly unjust.

Consider for a moment that medical men are wanted because they possess a certain scientific knowledge and skill, and therefore they of all the various professional classes are to be uprooted from their present positions and transplanted into spheres where their services may or may not be of greatest service to the community. No account is taken of the domestic disruption which may follow this procedure, or of the financial embarrassment which may face the unfortunate individual. If the Government have need of specialists in other directions, "hewers of wood or drawers of water," chemical experts or munition authorities, do they compel them to accept a rate of pay which will barely cover their rent? It is true that war profits are taxed, but we have heard something of the extravagant scale of such profits which will well stand a whittling down of 50 or even 75 per cent., and still leave a handsome margin with the contractor. Are the lawyers who argue in the Prize Court over the prizes, so hardly won by our fleet, docked of their fees? Have they to forsake their homes and give themselves over body and soul to a Government department? The medical man is to receive quite different treatment: he is to accept what the authorities are pleased to call an adequate sum of £400 per annum, less income tax; his house is to be rendered desolate; his dependents are to face the *res angustæ* of private life; his practice is to be jeopardised—a practice which may have taken years to build up, and which depends solely upon his own personal efforts. No doubt coercive legislation would be achieved easily. The medical profession has ever lacked the forensic eloquence to plead its cause or the political cunning to further its interests, and although it has been accused of forming the closest Trades Union known when it refuses to accept some unqualified man whom journalistic enthusiasts have boomed and advertised, it is as a matter of fact ununited and incapable of resisting the injustices which may be inflicted upon it. Ill represented in the Commons—and those there cease to be medical men when they become politicians—a considerable section has recently been rendered inarticulate, owing to the fact that officers in the R.A.M.C. and Navy are unable to air their views and express their opinions. No part of the community has been or is more ready to carry out its duties in connection with the war than the medical profession, but throughout it has been hampered by want of a central organising body which it can respect and on whom it can rely. If such a committee representative of the profession could be appointed, on whom medical men could depend for the defence of their interests and for the help of the Government, the present crisis would pass. In effect, the War Office Authorities wish to obtain a great favour from the profession; but they demand it as a right and with threats. Our reply should be: we will concede the favour, but suitable terms must be arranged—yours are harsh and unreasonable.

What should our terms be?

Half-time men must be accepted and recognised in the various military centres under a proper system, and six months' service abroad should be permitted. There can be no great objection to this, as the average hospital appointment (resident) is for that period. A man might be ready to give up his practice for six months, but he hesitates at twelve—a period which finds him quivering on the brink of a financial precipice.

Discrimination must be exercised in the selection of men for the different posts—attempts to fit square pegs into round holes have ever been a feature of the Army Medical Service—and some organised attempt must be made to see that, as far as possible, suitable work is given to each applicant, so that such anomalies as surgeons acting as medical officers of health, or orthopædic surgeons in charge of medical wards, shall exist no longer. Medical men should be allowed to do their medical work; the clerical labours apparently essential to the War Office, can be left in the hands of the R.A.M.C. personnel. Rank and uniform should be eliminated if possible; and civilians, unless serving at the front, should pursue civilian work in their customary manner. For those engaging on foreign service rank may be essential, but let it be in reasonable keeping with a man's professional position: to lump all medical men together and grade them all as lieutenants or captains is unjust and ridiculous.

CURRENT TOPICS.

The Arnott Medal.

Never since its inception has the Arnott Medal been the subject of such keen competition as this year. In normal times it is a matter of small difficulty for the committee of the Irish Schools and Graduates' Association to select an Irish doctor who has performed some brave act or distinguished service upon whom to bestow it. But these are not normal times; and many Irish doctors, who in the ordinary way would have passed their lives "unhonoured and unsung," have found in the European war an unlooked-for opportunity of proving their mettle. It was, therefore, no longer for the committee a matter of seeking a hero from among the common herd; they had to rather select one from a crowd of heroes! We understand that no less than sixty names, all deserving, were considered by the committee. The selected one has, therefore, every reason for pride. He is Captain W. F. B. Loughnan, R.A.M.C., L.R.C.S.I., L.R.C.P.I., D.P.H., Diplomate in Tropical Medicine and Hygiene, Cantab. He was born in Kilkenny in 1881, and is the son of the late T. M. Loughnan, himself a distinguished soldier. He was educated at Rockwell College, and studied medicine in the Royal College of Surgeons, Ireland, and at the Richmond Hospital. He qualified in 1904, and, having acted as assistant in the Coombe Hospital and been senior resident surgeon in Jervis Street Hospital, Dublin, he entered the Army in 1906. He served in India and Arabia, and held the appointment of specialist in the prevention of disease in Bareilly and Aden. He went to France with the original Expeditionary Force, and served through the retreat and the advance. He showed conspicuous bravery on several occasions, and among other acts he secured the severed artery of a badly wounded officer on the battlefield, and carried him to a place of safety under fire. He was at length severely wounded by the bursting of a shell near him while performing a like dangerous duty. He was rendered unconscious, and lay buried in the *débris* till rescued by his comrades. The right brachial artery and some of the nerves were badly injured. He has been mentioned in despatches and awarded the Military Cross. No more worthy recipient of the medal could have been chosen than Captain Loughnan. We heartily congratulate him.

Lancashire's Birthrate.

At the quarterly meeting of the Lancashire County Council, held on February 3rd, Alderman J. Chadwick, Chairman of the Midwives Act Committee, referred to the steady decrease in the birth-rate during the last forty years from 36 per 1,000 of the population to 23 per 1,000. That decrease meant to Lancashire a loss of nearly half-a-million lives, or in exact figures 467,837 lives. The birth-rate and death-rate were getting very near one another, and in some districts the death-rate was the greater of the two. That state of things was an international evil which began in France, then came to this country, and had even invaded Germany, so that now the birth-rate of London was greater than those of Berlin and Hamburg. The Germans were getting very much concerned about it, and had adopted various means of dealing with the evil, even to the extent, it was said, of encouraging the marriage of brides of sixteen.

Much had been done in the direction of inquiry into causes, and also in the direction of reducing infantile mortality. In Lancashire it was found that 20 per cent. of the deaths of infants occurred in the first week, and 36 per cent. in the first month. In spite of these times of financial pressure, they were being pressed by the Local Government Board, and also by local authorities, to take steps in the matter, and he hoped that something would be done by the Public Health Committee to keep Lancashire to the front in this matter.

Presentation to Dr. Joseph Power.

In our correspondence columns will be found a letter from Dr. Stephenson, of Carrick-on-Suir, calling attention to a proposed presentation to Dr. Joseph Power, of Ardfinnan, in recognition of his services to the medical profession in connection with the certification question under the National Health Insurance Act. Dr. Power was one of the first medical men in Ireland to recognise the importance of this question, and for the past three years he devoted himself with great energy and ability to the furthering of the claims of the profession regarding certification. At the request of the Irish Medical Association he wrote a pamphlet on the relation of Irish medical men to the Insurance Act, which was of service in putting the professional case before the public. Dr. Power did much to keep the profession together in its long struggle, and was one of the most active members of the Irish Medical Committee since its establishment; for the first year he was vice-chairman of that Committee. As a member of the several deputations which on various occasions represented the Irish Medical Committee, Dr. Power is one of the group to whose determination and

judgment the settlement of the certification question is so largely due. We hope that the response to Dr. Stephenson's appeal will be worthy of the profession and of Dr. Power.

Scarcity of Ship Surgeons.

We notice in the *Glasgow Herald* that some of the passenger lines are having considerable difficulty in inducing medical men to take service at sea. This is quite understandable. In the past every young medico, when he graduated, considered a voyage as his first step in medical life, partly to see more of the world and partly for his health's sake. But these are abnormal times. When we can't get a graduate to act in the much-valued position of house physician or house surgeon in our large general hospitals, when we have to be doing with the help of a senior student—and sometimes not very senior at that—the shipowners must suffer from the shortage in the market also. Immediately the "boys" get capped with George Buchanan's touchstone, they want to be off to see the "fun." The remedy? "Will siller dae it?" We think it will.

Equanimity.

Mental fortitude, incumbent upon all, is especially so in the case of the medical practitioner—not alone for his own sake, in order to preserve the temperamental balance, but also for the benefit of his patients. In cases of continued illness, it is the anxiety arising from physical incapacity, even more than actual suffering, which causes the patient such acute distress: he looks to the medical adviser not merely for bodily alleviation, but in addition for intellectual support, and it is the combination of both lines of treatment which result in recovery. But let the sick man come to realise that the doctor's mind is as fluctuant and unstable as his own; that the same waves of peevishness and depression visit him; that his moral grip is equally spasmodic; and at once his own confidence is irretrievably lost. Rightly or wrongly, we think that the sphere of medicine is steadily widening to embrace eventually a domain up to the present dominated by philosophy—if dominated by any positive factor at all; and that, such being its future scope, none but those possessed of the rare capacity to see life steadily and see it whole can expect to be of utility therein. The ill-defined minor mental instability will, we believe, prove to be a malady of increasing importance—to be combated not by drugs, but by the too-often sneered-at therapy of Arnold—sweetness and light.

Re-examination of Recruits.

As "Truth" points out, there is bound to be hardship to some individual members in this re-examination of recruits. There is always a certain percentage of recruits on the borderland of inefficiency as regards health, and in examinations the personal equation tells largely. Different examiners have different standards—the same examiner may and does differ at different times in his attitude towards these doubtful cases. Further, as the pressure for men has increased, the standard has been lowered mainly because in such a large army work can be found for those who are not quite up to first-class fitness. At the beginning of the war numbers of men were refused or sent for operation if the slightest varicose condition were found in the veins usually affected. Indeed, there seems to have been a crusade to discover this venous defect, and were it ever so slight, disqualification followed. Athletes who had made records were turned down because of an almost imperceptible varix of which they themselves were unaware. Per contra, a well-marked case of hip-joint disease was passed into the ranks without question. The examiners had too many to look after to do the work properly, especially as the recruits came in rushes.

Recognition of Medical War Service.

The Royal Faculty of Physicians and Surgeons of Glasgow have made an alteration in their regulations for the examination to the Fellowship of the Royal Faculty in order to mark their sense of the value of war service given by members of the medical profession, and to facilitate the entry of those who render adequate war service into the Fellowship without unduly lowering the standard of qualification. Instead of two subjects of medical science being the scope of the examination, one alone will suffice, and this rule holds till five years after the end of the war. What is meant by adequate war service? Does it mean length of service, or having been within a minimum distance of combatant Germans? Will the fact of having worn khaki be adequate? What about the men working in Red Cross hospitals? Or will each case be settled on its own merits? Then no mention is made of the fee, whether reduced or raised. But that in the Royal Faculty will be treated as Mulvaney treated the elephant—"with outrajis contimpt."

What is a Hernia?

There is a clamant need for a clear definition of the cause or causes of ordinary hernia. Many cases are cropping up under the Workmen's Compensation Act, and opinions as to the effect of muscular strain or extensive force vary. In one court decision is given in favour of the workman who proves that he has had an accident, a strain, twist or awkward fall, and that he noticed the hernia first after said accident. It is argued that the accident caused an increase in the size of the hernia, and therefore legally is the responsible factor. It may even be held that the strain produced the hernia *ab initio*. Against that another court holds that it takes an infinite number of muscular efforts to produce a hernia, each effort producing its own infinitesimal increment in the growth of the tumour, and that the proved accident only brought an already existing but unknown swelling into the workman's ken. What the accident did was to fill the already existing sac to its limit and produce pain—if the said filling had gone further, strangulation would have ensued—which is quite another story. That would clearly have been an accident. But if an infinitesimal increase in the size of a hernia due to contraction of the abdominal muscles is to be held as the legal

cause of hernia, then what is to prevent a workman, after swinging a hammer once or twice, from stopping work on the plea that his hernia has become bigger and it is now a danger for him to work?

What would be useful would be the opinions of some of our outstanding surgeons (we bar physicians even if they are Medical Referees) as to

(1) What is a traumatic hernia; its frequency, causation, and appearance?

(2) What effect has a severe muscular effort on the size of the sac, and therefore on the growth of the swelling?

We cannot but think that it is unfortunate that the word "Rupture" is embedded in the lay mind, particularly in connection with this condition. Involuntarily the notion of something being burst or torn is a determining factor in the decision given in many cases.

The point is a fine one, but for dear logic's sake it ought to be made clear; if it cannot, then every hernia must be put down to "arising out of the workman's employment."

The Value of Inoculation against Typhoid.

We quote the following from the *Broad Arrow*:—"The policy pursued by the Royal Army Medical Corps with regard to inoculation against typhoid is amply justified by the figures given by Mr. Tennant in the House of Commons lately. He stated that, from the beginning of hostilities to 10th November last, 1,365 cases of enteric fever were reported as having occurred among British troops in France and Belgium. Of these, 1,150 had been diagnosed after bacteriological examination. In 597 cases where there had been inoculation thirty-five deaths resulted; when there had been none, 115 deaths, or more than three to one. Such a marked difference cannot be explained in any other way than by reference to the work of Sir Almroth Wright and Sir William Leishman, who were so loyally supported by some of the most famous scientists of the day. In the field the value of the policy they advocated was equally well understood, and was carried out with comprehensive thoroughness. Not only was every man who consented inoculated against the disease, but he was further protected against infection by the precautions taken with regard to sanitation, water analysis, and water purification. Then a careful search was made for 'carriers,' the technical term for persons who, while keeping well themselves, harbour the bacillus of enteric fever in their bodies, and so are liable to spread infection. In the handling of food they would be particularly dangerous, so that in the commisariat department, the search for 'carriers' is always keen. To estimate the debt we owe to science and the splendid organisation of the Army Medical Service in connection with disease we have to compare the relatively small record of the present great war with the shocking records of wars of only a generation ago."

Temperament.

Facility of temperament is a blessing which cannot be over-estimated. If we construe it aright, it consists in a capacity to dismiss from consideration difficulties which cannot be overcome—in a sublime faculty to accept possibilities, if they be pleasant, without question, or analysis to their ultimate and too frequently arbitrary basis. The converse type, the man of difficile soul, affords a picture which we fear is more common and, alas, upon the increase. He is profoundly conscious of the less happy side of life, realises the still sad music of humanity to the finger tips, and where jocund emotions cross his spirit bids them stand and deliver answer to the eternal questions of whence and whither. He ventures no enterprise—human or divine—foreseeing each obstacle in meticulous detail. He makes no confidences—are not they customarily betrayed? He forms no friendships because the inevitable anxiety and responsibility attendant upon intimate human intercourse outweighs for him the gigantic spiritual gain. He is afraid, in a word, of developing the activities natural and necessary to the growth of the human soul. Not for him the free heart and forehead of Ulysses. But the opportunist—in the best sense, tries all things, proves all things. His existence is a quest, a great adventure. He is a schoolboy playing truant in the fields of life upon his shadowy and unknown master. His is the philosophy of the apostle—"Hold fast that which is good"—which finds its modern archetype perhaps in the immortal Robert Louis Stevenson.

Miners' Phthisis in South Africa.

The government mining engineer of the Union of South Africa writes the following in his annual report for the year ended Dec. 31st, 1914:—"The monthly returns of the Miners' Phthisis Board show that the number of awards to miners for phthisis, both in the initial and in the more advanced stages, is beginning to fall off substantially. This is an indication that the disposal of the large number of cases of miners' phthisis, accumulated over many years, is at last nearing completion. In future, therefore, the returns of the board ought to reflect the current position, and to be an increasingly reliable index of the extent to which success is being attained by the more thorough measures initiated during the last few years for the eradication of the disease." The president of the Chamber of Mines recently pointed out that since the commencement of the Miners' Phthisis Board on August 1st, 1912, until April 30th, 1915, the total number of applications disposed of by the board per quarter had decreased by almost exactly one-half, which was a very large decrease—even when it was remembered that at the commencement of the board's operations the accumulation of past cases would naturally inflate the number of applications received. The same decrease has been maintained for the quarter ended July 31st, 1915.

PERSONAL.

Mr. J. W. Knapman, Librarian to the Pharmaceutical Society, has completed 50 years' service in that position.

Lieut.-Col. E. Jennings, I.M.S., has been appointed to act as Civil Surgeon, Belgaum, in addition to his military duties.

Capt. R. H. Bott, I.M.S., Professor of Surgery, Medical College, Lahore, has been appointed Professor of Operative Surgery.

Mr. C. Warburton, M.A., Christ's, has been appointed Demonstrator in Medical Entomology at Cambridge until November 1st, 1918.

Mr. H. H. Brindley, M.A., St. John's, has been appointed Demonstrator of Biology to Medical Students at Cambridge until September 30th, 1920.

Mr. A. W. Bain has been elected as Chairman of the Harrogate Infirmary in succession to the late Mr. J. W. Wilson. Mr. Bain, who is an ex-Lord Mayor of Leeds, and resides at Harrogate, was specially invited to join the Board and to accept the chairmanship.

ORIGINAL PAPERS.

THE PHYSIOLOGY OF SCYBALA.

By SIR JAMES F. GOODHART, Bart., M.D., F.R.C.P.

Intestinal bricks and their mortar! Who pauses to think about scybala, beyond the fact that they indicate constipation and need a purge? Yet they may be instinct with physiological teaching if we can but read it. Of late years the investigation of the intestinal secretions and excretions has gradually asserted itself, and valuable knowledge of an exact kind concerning them is accumulating both from the side of biological chemistry and bacteriology. The bio-chemist has probably taught us most, although his line of research is not one of the most pleasant to follow. Bacteriology, on the other hand, would seem to lend itself to dreams of "The garden that I love" and to poetic imaginings of intestinal "flora." But intestinal horticulture is hardly in sight yet; we are all still busy practising our pothooks, outlines, and elements of perspective, and one is as yet rather framed in the mould of

"Oh, give me air and syringe me with waters of Cologne!
Dry as a Hortus siccus run to seed, and overblown."

But neither chemical nor bacteriological aspect is my purpose now; I propose to ask a question or two of scybala from the point of view of what I may perhaps call general intestinal function.

A man, say—for choice—is troubled with a bad pain in his abdomen, somewhere behind the umbilicus, or rather above it. It is chiefly a night or early morning ache, yet, more or less there is always a something there. All sorts of suggestions are of course made as to possible causes, but no evidence points definitely to any certain diagnosis. There is constipation, no doubt, and scybala have been noted as present in the bowel, and have been removed *secundum artem*, but—and this is my point—others have quickly appeared. Such an one shall tell you that within a short time the bowels acted with perfect regularity, and the condition is attributed to anxiety or worry. I have elsewhere mentioned just such a case. A man, who being of absolutely regular habits, had a severe nervous shock in a railway accident, and thereafter at once began to pass scybala of stony hardness, and no doubt my reader can supply many a similar picture from his own notebook, for it is indeed one of the commonplaces of medicine.

What does this mean? To murmur "constipation," and content oneself with a purge does not go to the root of the matter, for when one formation is cleared out another comes along. Constipation no doubt favours the formation of scybala, especially in the sigmoid, but the occasional suddenness and rapidity of their formation is to me the interest of the condition. No mere sluggishness of the intestinal muscle will explain this. Though you clear them out, on come others; diet helps little; you may stuff and feed on anything and everything and no beneficial effect is very evident, and unless the bowel be kept constantly on the run scybala will be present.

Putting, then, diet, both as regards quantity and quality, and drugs out of present question, it would seem that the phenomena must be due to the too rapid absorption of the watery constituents of the contents of the bowel, or to cessation of the formation of the succus intestinalis and mucus.

As regards a too rapid absorption of the intestinal fluids, there is, perhaps, not much to be said, yet there are interesting suggestions as to why it might be found in some of the phases of unnatural hunger that are met with in various deranged states of the abdominal nervous system. There is a condition well known of extraordinary and uncontrollable hunger that will attack some nervous subjects, perhaps when they are gouty, at any rate when they are not quite well, or before an attack of migraine, and which may well be due to a too rapid absorption of the contents of the stomach and intestine. I allude to this condition somewhat sympathetically because I often say that one who thus suffers may perhaps know something of the cravings of the drunkard from an appetite of this kind—certainly it is most difficult to resist. One might almost describe it as the luxury of sorrow, for although hunger is a pleasant sensation, this verily is a hunger pain. I remember many years ago an old friend, then demonstrating daily in the *post-mortem* room at half-past two, describing to me the extraordinary shifts he had been put to to provide himself with a lunch that under the stimulus of mental excitement would not leave him empty and destitute in the middle of his lecture. If the drunkard's craze is anything like it, I can understand and sympathise with the dipsomaniac.

There are other clinical facts that bear upon the same question, such as the well-known cravings of pregnancy, also what I have elsewhere ventured to call hungry bowels, a restless abdominal condition where purgatives are in constant use to keep a bowel empty when its health and function depend upon its being moderately full, and where the patient will sometimes come and tell you spontaneously that he or she is only comfortable when the bowels have not acted. There is a habit of purging that induces constipation. So it seems not unlikely that too rapid absorption plays a part in some cases of scybalous formation, although perhaps not so much in the class of case now before us.

Nor do I know as regards the sudden cessation of the formation of the succus intestinalis that we are much better off as regards actual knowledge. We seem to think we know a great deal about the existence of a catarrhal state with an *excess* of the intestinal mucus, and in consequence are apt to lay far too must stress upon it. Having diagnosed a case as one of mucous colitis, it is forthwith locked up in the catarrhal and dysenteric group of intestinal ailments, treated in one of the more or less routine methods, of which the Plombière douche is perhaps the commonest, and then we would have done with it, only that it won't let us, for it is a most exasperating malady both to patient and doctor—in fact, both too often lose their heads over it, and I have often been shown a stool,

as that of mucous colitis, when there has been no more mucus than one might expect to see in quite healthy conditions. As if it were a crime on the part of the mucous membrane to perform its natural and necessary function; and more or less—one day this, another day that—and not within the range of a natural and common oscillation. We have certainly not got at the back of mucous colitis, as some seem to think, when an excess of mucus is present in the stools.

But what do we know about dry bowels? Well, we know of a *dry* tongue, and a *dry* mouth, and a *dry* throat. We can see these, and they may perhaps be taken as presumptive evidence of the occurrence of a similar condition lower down in the intestinal tract. For the rest I can most conclusively appeal to a piece of experience that only those in the habit of examining the rectum as a means of diagnosis will fully appreciate. They will readily acquiesce in the statement that a dry mucous membrane in the lower bowel is by no means uncommon, though, as far as I know, it gives little or no discomfort. At any rate, I have frequently remarked its presence where no complaint has been made of local discomfort.

In such cases the mucous membrane is quite dry and generally coated with a thin adherent layer of fæcal matter. A similar condition is often seen in the colon in making *post-mortem* examinations, but this might possibly be a condition produced after death. One may well suspect, however, that some such state is not uncommon during life, and that if so, it has to do with this or that alteration of the intestinal discharges. It is the fashion just now to suggest an *absorption* toxæmia for all the results that follow upon intestinal derangement, but as I listen to all that is said on that behalf I wonder! Rather do I think that the *absence of absorption*, the *absence even of secretion*, claims no small share in abdominal malaise. I have appealed to the cleaving of the tongue to the roof of the mouth as a something we have all experienced in some degree as an immediate result of a sudden nervous shock or excitement, and I think it probable that a similar occurrence must be present in many of the intestinal disturbances and their consequences that are met with so commonly in general practice. The scybala thus formed come about as the effect of a splanchnic paralysis, the more or less of which will sufficiently account for the hundred and one different sensations and symptoms that are to be heard of in the neurasthenic patient and not alone in them.

A splanchnic paralysis of this kind is probably seen at its worst by alienists in profound melancholia, where not only is there the most obstinate constipation, but extreme emaciation also, showing that intestinal absorption and secretion both fail, as well as hepatic and other glandular actions.

Whether, then, scybala be the result of too rapid absorption or defect of intestinal secretion, it seems probable that in either case splanchnic control is behind it all.

Nor is the nature of abdominal and intestinal pain beside the mark in talking about scybala, for the passage of hard concretions along the colon is associated in some with very violent pain, as is also the formation of gas. In his Goulstonian lectures before the Royal College of Physicians, Dr. Hertz gave some careful observations made by him to show that the intestine has none of what goes by the name of common sensation—that is, if you pinch it, the stimulus is not recognised as pain. This is no doubt true; it is true also of the heart, and probably of a good many of our inward parts. I think one might almost say that we knew this already, for it does but illustrate a law of our being, that every pain is more or less special—peculiar, that is, to the region wherein it originates, or to the part wherein it is perceived. Thus, common sensation—a surface or skin pain—is a soreness, if it be possible to describe pain; then there is a serous membrane pain of pleura and peritoneum still more difficult to convey by word picture, because, perhaps, it is a mixed product of separate areas; different conditions thus combine, such as acute stitch, distension, collapse, all liable to vary much in different individuals. Again, there is the hot, burning wave of pain suggestive often of the passage of grit along a narrow muscular passage; there is the dull, dreadful ache of the sympathetic ganglia, well illustrated by the pain of angina, thoracic or abdominal; there is the pain of lumbago, cervical or lumbar; there is the neuralgic type of pain in neuritis of such parts as are subject to much energy of motion, such as sciatica, humeral neuralgia and tic; there are the various forms of headache, by no means like pain of other sorts; and also the various disturbances of special sense which, although they are not pain, are only not so because the disturbance they undergo is their pain and their only form of speech. I take it that the auditory nerve can only express pain as an acute exaggeration of its special sense, and sight, smell and touch in like manner. Thus all the varied nervous distributions are strung to their own concert pitch, and the intestinal nerves, as Dr. Hertz quite rightly points out, are only capable of a muscular pain, which is that of a cramp—let him describe it who can—acute or dull, sickening, depressing. Scybala of moderate size will often produce some little griping pain, dependent upon the muscular effort on the part of the bowel to rid itself of them, but the larger masses, of which I am now more particularly thinking, seem to give very little, for the bowel is, as I suppose, paralysed and makes little effort. I have occasionally seen a case where scybala were supposed to be present with intestinal obstruction, but this is rarely the case; experience would teach that for the most part they are evidence against it. This leads me on to make the very obvious, but necessary, remark that these pains, and sensations that are equivalent to pain, vary *ad infinitum* in character or intensity. So much is this the case that, interesting as most of them are to think upon and extract a meaning from, it is impossible to attempt any detailed description of them. One or two of the commoner forms can, however, be mentioned. And first of all I would speak of the dull depressing ache about or somewhere above the umbilicus already mentioned. It will often last more or less continuously for many days together, perhaps a week or two; some individuals are subject to it from time to time as a part of their life history. It is not altered much by food one way or the other, nor bettered by aperients. It disappears slowly—not flattering our treatment much. I cannot but think that this is an anginal form of ache emanating from the abdominal brain, a headache in the abdomen, and that it is associated with spasm or cramp of the colon. Probably this condition often passes under the name of flatulent colic, but flatulent distension is not a prominent feature; there is no doubt the *feeling* of distension and heaviness, and there may be, as is so well marked in many a case of angina pectoris, the eructation of wind, and even discharges of gas per anum, but these bring but little immediate relief to the pain.

Allied to this condition, but by no means the same thing, for there is not the same deadly ache attaching to it, that is so de-energising, there are many who describe a persistent discomfort and more or less actual pain, as of a muscular

ache or soreness under the left ribs. This is associated with more or less flatulence, and with it there is likely to be constipation associated with spasmodic contraction of the colon, and the passage of tape-like stools that frighten a little knowledge into the fear of cancer. The descending colon or sigmoid flexure can often be felt thick and cord-like in the left loin or groin, and is tender. I imagine that these conditions of the colon must be due to some disordered state of the nervous supply to the bowel, and leading to a tonic spasm similar to that seen in the voluntary muscular system in tetany, with which, it may be observed, disturbances of the colon are well known to be associated.

And when talking upon such intestinal states as these, there is another not far removed from them which I try to bring in because I do not think it has ever received any pointed description, but which must be, I think, by no means uncommon in general practice, a general malaise that seems as if it might be akin to *mal de mer*. Certain people are subject to this condition from time to time throughout their active years. If it has never been described one may hazard the reason to be because it is indescribable. The patient himself can give little precise clue to his feelings, but it appears to be a life-is-not-worth-livingness that emanates from the splanchnic area of the abdomen, and is associated with evidences of all the secretions of the body having gone wrong. It is one of the group to which the term abdominal migraine seems to me fitly to apply, and as a morbid anatomist one's mind hovers over the pancreas. I am far from wishing to see things with a coloured vision, and such conditions as I allude to may be, in their origin, a toxæmia, intestinal or uric acid, or what not. They may equally be initiated, I daresay, by one of the many "itises" that exploit this part of the body, but if so they do not seem to respond to treatment undertaken on such lines; on the contrary, they have a tendency to run a certain course, irrespective of treatment, so that one is inclined to think of some such influence as a climatic one rather than organic change; and of watts, ampères or voltage, if there be such a measure, or their equivalent, of nervous current, than actual wear and tear.

But thoughts such as these are as shifting sands. Well do I remember that Sir Samuel Wilks would almost turn up his kindly nose if anyone began to talk about the sympathetic nerve. Steeped in the facts of the *post-mortem* room, the vasomotor system did not come within his view, and he rightly held that as yet we know nothing about it. More than that, it will be a long, long time before we do know enough about it to formulate our knowledge, and the scientific mind will have nothing to say upon agnostic matters. Yet, meantime, we doctors have to deal with deranged splanchnic function, and provided we do no more, there can be nothing but good to be got from guesses at truth. There can be no question that we all possess an abdominal brain and nerves; that this nervous centre is there to express itself in initiative and control; that it has extraordinarily sympathetic relations with the cerebro-spinal system; and therefore if disturbed or worried, some signs will be given if we can but read them.

In default, then, of adequate morbid anatomy, the times would seem even still to call for careful observation of morbid function by the physiologist and the physician, and betimes even, perhaps, for the guarded use of their imaginative insight, taking up its position at the point where, for the present, morbid anatomy has perforce to abandon it. At any rate, one may say this: that of all the interesting parts of the human body, the abdomen is probably one of the most so from the extraordinary vagaries of nervous action that are to be heard of therein. Would that circumstances would allow of the study of such maladies free from the terror of treating them that lies behind it, and unfortunately for meditation, fortunately, perhaps, for those who ask for relief from their distressful state, surgery has of late from a somewhat divergent point of view rather queered the physicians' pitch, rushing in where others heretofore had feared to tread and asked for time. I would be on the side of those others in this matter, hence these rambling thoughts when no sick one is ruffling the waters of my mental pool.

A NOTE ON THE CERTIFICATION OF INSURED PERSONS IN IRELAND.*

By ROBERT J. ROWLETTE, M.D.Dub., F.R.C.P.I.,

Physician to Jervis Street Hospital, Dublin.

Among the most troublesome problems arising out of the administration of the National Health Insurance Act in Ireland, in so far as it concerns medical men, has been that of obtaining evidence of incapacity for work such as to entitle an insured person to sickness or disablement benefit. The problem has been one especially affecting Ireland, owing to the absence of the medical benefit in this country, since in Great Britain the machinery set up for administering the medical benefit was readily made available for furnishing medical evidence of incapacity.

The Act itself nowhere lays down the nature of the evidence on which a society is to decide whether a member is entitled to benefit or not. Approved societies are authorised, however, with the consent of the Insurance Commissioners (14 (13)) to make rules with regard to, *inter alia*, "notices and proof of disease or disablement, behaviour during disease or disablement, and the visiting of sick or disabled persons." Moreover, special powers are given to approved societies in Ireland as regards the obtaining of evidence (81 (13)):—"Rules of an approved society or insurance committee under this part of this Act may provide for the inspection of medical relief registers by officers of the society or committee at all reasonable times, and for the furnishing to the society or committee of such medical certificates as may be necessary for the purposes of the administration of the benefits administered by the society or committee, and for the payment by the society or committee to duly qualified medical practitioners in respect of the furnishing of those certificates as the Irish Insurance Commissioners may sanction, and all payments so made by the society or committee shall be treated as expenses of administering the benefits aforesaid." As far as I know, no approved society in Ireland has ever taken advantage of this clause to pay for medical certificates, although several have employed medical advisers to assist them by their judgment as to the merit of claims. Up to the present, where a society has demanded a medical certificate as evidence of incapacity, it has thrown the onus of obtaining such certificate on the insured member himself.

In the absence of any attempt by the societies to furnish themselves with satisfactory evidence of incapacity of their members, it was clear that the State would have to take the matter in hand.

It may be well, in the first place, to discuss what possible methods there are of obtaining evidence of

* Read before the Section of State Medicine in the Royal Academy of Medicine in Ireland on Friday, January 7th, 1916.

incapacity, and to compare their respective merits, from the points of view of efficiency, public economy, and professional ethics. It will hardly be questioned, in the first instance, that evidence of incapacity obtained from a medical man is more likely to be trustworthy than that obtained from a layman, and I will not waste time in labouring this point.

Assuming, however, that medical evidence is required, how best can it be obtained? There are three possible sources—the medical man in attendance, another medical man who is not engaged in practice, and a medical man who is engaged in practice. It is clear that the medical man in attendance is in the best position to form a just opinion of the condition of his patient. He knows the history of his illness, very probably his previous history, and he watches the progress of the case from day to day, or from time to time. His opinion, therefore, if honestly given, is likely to be the best. It has been suggested, however, that the opinion may not always be honestly given, that the medical man may be swayed by kindness to his patient, or by interest in prolonging his attendance. It is hard to disprove these suggestions, though it is not for a moment to be believed that such influences would affect many members of our profession. It is worth remembering, however, that in Ireland a very high proportion of insured persons are attended by dispensary medical officers, who are under no temptation to prolong their attendance beyond what the condition of the patient requires. Again, in the Poor-law Service medical officers have the power of ordering outdoor-relief for the sick poor, and it has never been suggested that they have exercised this power in any other than a careful and proper spirit. It is fair, therefore, to conclude that as regards efficiency the medical attendant stands first.

As regards economy, the case is easier. The medical attendant is already seeing his patient regularly, and the additional labour required from him in order to furnish certificates is not comparable with what would be required if a medical man were to visit the patient merely for the purpose of certification. It costs the public less to commit the two duties of treatment and certification to one man than to occupy two men with tasks which overlap. As a practical matter it would be nearly impossible to maintain a sufficient staff of whole-time officers to do all the necessary certification work.

Next, as regards professional ethics, one does not need much imagination to figure the difficulties which inevitably arise if one medical man is to visit and investigate the condition of the patients of another medical man in his absence, and without his assistance. In some cases, in order to form a just judgment of the patient's condition, it would be necessary to interfere with dressings or apparatus, and so far, perhaps, to interfere with the course of treatment. Even with the greatest care and tact it may be difficult to refrain from observations which may be regarded by the patient as reflecting on the treatment advised by the medical attendant. When the certifier is not an independent whole-time officer, but is a practitioner in active competition with the medical attendant, such evils are magnified ten-fold. Even if he be a man of absolute honesty and sound judgment, insured persons will inevitably think that they will get their benefit more readily if they are his patients than if they are not. The confidence of the public is necessary, and by the facts of his position a part-time certifier is deprived of this from the start. If he be a man at all prone to take unfair advantages of his rivals, temptations to undermine the confidence of their patients and otherwise to interfere with their practice are overwhelming. I need not point out that the arguments I have here put forward have been amply supported by the events which have unfortunately come into our experience in the last few years.

From all points of view—efficiency, economy, professional propriety—the best evidence of incapacity is to be obtained from the medical attendant.

Nevertheless, it is only right that if either party —the approved society or the member—feel aggrieved by the decision of the medical attendant, there should be power to claim a second opinion. The wise medical man does not claim infallibility, and he will be glad, in doubtful cases—and many such arise—to have the assistance of the judgment of another. But it is essential that the second opinion should be that of a man of standing, whose skill and character command confidence, and that he should hold his position independently of the favour or control of any approved society.

Considerations such as I have mentioned have formed the basis of the claim made by the profession in regard to this problem during the past four years. The profession has made two demands—(1) That primary certification of incapacity should be in the hands of the medical attendant; and (2) that the remuneration should be adequate. On the point of referees, the profession had said:—We do not ask for referees, but we will welcome their appointment, but we insist that they should be men of character and standing.

I can run very briefly over the history of the tedious struggle which has taken place before these demands were granted by the establishment of the system which came into force on the 1st January of this year.

The Insurance Act came into force in July, 1912, and at the beginning of 1913, an annual grant of £50,000 was made available for payment for certificates. The grant was regarded as inadequate by the profession, and the proposals made on the basis thereof were refused by the profession in the greater part of Ireland. In Belfast and certain other northern areas, and in some areas in the south and west, the proposals were temporarily accepted, and a scheme based thereon has been working with fair success. This is what is known as the "panel system," and it is necessary to explain it briefly. A sum of money, calculated at a capitation rate for insured persons in the area, was assigned to each area. The rate varied from 9d. *per caput* in Belfast and other urban areas to 2s. *per caput* in the most inaccessible rural areas. Every insured person was to choose a medical man by whom he expected to be certified, and the medical men were to be paid in proportion to the number of insured persons who exercised their choice in his favour. This scheme was regarded by the medical profession as satisfactory in principle, but, as a matter of fact, in very many cases no real choice was exercised by the insured person, the names being assigned in mass to certain medical men by the local agents of the approved societies. In this way it happened that the medical attendant was very often not the person who actually certified. Nevertheless, speaking generally, the system did not work badly, and in Belfast in particular, both the profession and the officials of the societies expressed their satisfaction with it. The refusal of the greater part of Ireland to accept the system made it clear that it had no real permanence, and consequently it never got a fair chance to prove its worth.

This refusal of the greater part of Ireland to accept this system was based on a conviction that the remuneration was inadequate. In these areas, comprising about three-fourths of the country, the Com-

missioners attempted to solve the difficulty on a different principle.

They appointed a number of medical men—some 170 in all, I think—under the title of "medical advisers," or "medical certifiers." These practitioners were part-time officers in receipt of fixed salaries, but it is not clear what duties they had to perform. It was generally understood that their duty was to furnish evidence of the condition of all insured persons who were referred to them, but this was expressly denied, as regards some of them, in certain documents issued by the Insurance Commissioners. In Dublin, for instance, the Commissioners declared that "these officers have not been appointed with a view to assisting the individual members of approved societies to obtain sickness benefit, but in order that an approved society shall not be obliged to continue to pay sickness benefit in cases where the members receiving such benefit are, knowingly or unknowingly, capable of work." In other words, the duty of the "adviser" was to act as a referee, and the onus of producing primary evidence of incapacity was still left on the unassisted member. Reasons have already been given for believing that even under the most favourable conditions such a scheme as this would not be a success. But the conditions were anything but favourable. The medical profession, holding to its cardinal principle that the medical attendant should be the certifier, disapproved of the system and, as a consequence, few medical men of reputation cared to undertake the work, and the staff of certifiers was not only insufficient in numbers, but the character of many of those appointed was not such as to command public confidence.

In spite, however, of the protests of the profession, and the injustice inflicted on the insured, this condition of affairs lasted for more than two years. It is only within the past few months that the decision to abolish both the panel and the certifiers has been made, and to establish the system which has just come into being.

The new scheme provides that every medical man who chooses to do so shall have the right to furnish to his patient on demand evidence of incapacity or capacity, and that he will be paid for furnishing such evidence. Moreover, it expressly prohibits a medical man from signing a certificate for a patient who is at the time under the care of another practitioner, except in certain well defined cases. The provisions bearing on these points offer a fair safeguard against interference by one practitioner with the patients of another, and fully satisfy the principle for which the profession has fought, as to the right of the medical attendant to certify.

The annual grant now available is between £90,000 and £95,000, being a capitation rate of 2s. 6d. per insured person. This is to bear the expense not only of the primary certification, but of referees or second opinions. It is distributed to the different parts of the country at rates varying from 1s. 3d. to 2s. 6d. per insured person. The final mode of distribution as between the several practitioners in a particular area is not yet decided, the Commissioners being desirous of gaining some experience of the working of the scheme before coming to a decision on this point. They have, however, promised to consult professional opinion and not to decide on a scheme which is not acceptable to the profession.

Unfortunately, it is not possible at the moment to make the scheme complete by the appointment of referees. The Commissioners have properly felt that in the absence of so many practitioners on the service of the country, it would be inopportune to create a number of important civil service posts. Consequently, this part of the scheme must stand over for the present, but the Commissioners promise to proceed with it at the earliest moment, and in their choice of candidates to consider nothing but professional merit.

Such is the scheme now in force in this country. It success depends to a great extent on the hearty and honest co-operation of our profession, all the more in the temporary absence of provision for referees. It is, I think, incumbent on every medical man whose practice touches the insured classes, not only to join in the scheme as a certifier, but to take his part in moulding the professional conscience to condemn as a crime any careless or dishonest certifying. The General Medical Council has already warned registered medical men of the danger of issuing misleading certificates.

There are many points in the new scheme which entice to discussion, but I have already exceeded the reasonable limits of your patience. I have thought it better to give a general sketch of the problem than to enter into details of history—much of which will, I hope, soon be forgotten—or to enter into a minute discussion of the new scheme. It is, however, a source of deep gratification that the painful and bitter struggle of the past few years has been ended by the success of principles which the profession held dear. We can look forward to a cessation of strife and ill-feeling within the profession, and a cordial and friendly co-operation with those who are responsible to the country for the administration of an Act which, whatever be its faults, has great possibilities of good.

TRENCH NEPHRITIS.

By W. LANGDON BROWN.

In introducing the discussion on this subject at the Royal Society of Medicine, Dr. Langdon Brown said that acute nephritis is not a common disease in civil practice; at St. Bartholomew's Hospital, with an average annual admission of 7,000 medical cases, there were in five years only 26 cases in men of military age. And whereas dysentery and typhoid had dogged most campaigns in the past, acute nephritis usually did not. It was very rare in the South African War, but in the American Civil War there was a very considerable outbreak, which assumed epidemic proportions between March, 1862, and March, 1863. Throughout that war there were 14,117 cases, and it was interesting to recall that the military conditions resembled those of the present war. There was the dash forward of the Confederates, which was checked and followed by prolonged trench warfare. The epidemic in the British Expeditionary Force had not reached such dimensions, but up to the end of June, 1915, there had been 1,062 cases, and they had not been diminishing since. Reports from Vienna showed that the enemy were also affected by the disease, which started about the same time as in our Army, and as in the American Civil War, *i.e.*, in March.

Exposure as a cause was negatived by the facts of the rarity of the disease in South Africa and in the Russo-Japanese War, and also because it was not until the weather began to get warmer that the disease assumed epidemic proportions. A climatic cause would not explain an epidemic such as that in the American Civil War, which lasted twelve months and did not recur in subsequent years of the war. Various other causes, such as the water supply, chlorination of the water, intestinal toxæmia and acidosis had been suggested, but could be excluded. Only a few cases could be explained as an exacerbation of chronic nephritis. The

French Army surgeons had suggested that the epidemic was due to a suppressed form of scarlet fever. In this connection it was interesting to note the immunity of the Indian troops from nephritis, as the inhabitants of India enjoyed comparative immunity from scarlet fever. Although this theory would not stand examination, it was important to note that the urinary and pathological changes in trench nephritis and scarlatinal nephritis were closely similar.

Various chemical tests had been employed which showed that as in a nephritis of infective origin, trench nephritis was glomerulo-tubular in distribution, and this had been confirmed by *post-mortem* examination in some of the few fatal cases. As to the nature of the infection, cultures from the blood, fauces and urine had yielded no positive bacteriological results, but Dr. Mackenzie Wallis had obtained suggestive, though not conclusive, evidence of an ultra-microscopic filter-passing virus by injecting the urine, which had been passed through a Berkefeld filter, into rabbits and monkeys. A severe illness was produced after a latent period of eight days, which would exclude a mere chemical cause, and corresponded to the incubation period which had been observed clinically. Wassermann's reaction was positive in about one in every three cases. This did not mean that such patients were necessarily syphilitic, as other animal infections would produce a positive reaction. A filter-passing infection was believed to be animal in nature.

A number of the cases had had symptoms of fever and malaise before the nephritis, but usually œdema was the first symptom. Shortness of breath had been a striking and very common symptom, starting at the same time as the œdema, but ceasing after a few days. Bronchitis was common, and a fair proportion of patients had complained of sore throat. Great reduction in urinary secretion was not so common as in ordinary acute nephritis, while great variations in the quantity was not uncommon. Hæmaturia sometimes continued long after all signs of active inflammation had subsided. Leucocytes, epithelial, granular and fatty casts were usually found in the urine, though blood casts and fatty casts were rare. Uræmic convulsions occurred occasionally, but generally yielded to free venesection.

A considerable proportion of the cases recovered speedily, but if this did not take place soon, the duration might be prolonged for weeks or even months. The albuminuria often became intermittent before it ceased altogether. Relapse was not uncommon. Some, no doubt, were becoming chronic nephritics, but the immediate mortality was very low.

He gave reasons for believing that the epidemic was due to a specific infection, probably resembling, but not identical with, the organism causing scarlet fever. He thought that animal inoculation experiments with material from recent cases were advisable, and suggested that much might be learned as to the mode of infection by the preparation of maps showing the exact distribution of the cases.

DR. GEORGE ALLAN HERON, formerly of Harley Street, W., left £1,007.

DR. J. J. O'SULLIVAN has been elected Mayor of Waterford. He has been Alderman and High Sheriff of the city.

MISS ELLEN PEARCE, of Southsea, has left £500 each to Dr. Barnardo's Homes, the Royal Portsmouth Hospital, and the Portsmouth Victoria Association for Nursing the Sick Poor.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

SECURITY OF TENURE FOR HEALTH OFFICERS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In the excellent paragraphs in which you refer to the decision of the Government to make the tenure of office of M.O.H. permanent, you modestly refrain from taking any credit for what your excellent paper has done to promote this reform. During the twenty years in which I have known the MEDICAL PRESS AND CIRCULAR you have persistently exposed the weakness of the M.O.H.'s position. It is certain that Mr. John Burns, the late President of the L.G.B., was fully informed of the views of the medical world; his utterances constantly showed that he got his knowledge from medical papers direct. It was he—the most able President of the L.G.B. of my time—who paved the way to the proposed reform which his accomplished successor, Mr. Long, is now about to complete. Permanency of tenure for the M.O.H. is most urgently called for in the smaller urban districts of which the population varies between 20,000 and 100,000. At present under county councils and in our great towns with populations of 500,000 to 1,000,000 or more, the Medical Officer's position leaves little to be desired. County councils and the councils of great towns always contain a strong minority if not an actual majority of men of education and some statesman-like qualities. Enough men of this character and with public spirit enough to render them willing to make the personal sacrifice involved—the work never gains either honour or fame—are always to be found in a large community. In our smaller towns it too often happens that the majority of citizens cannot be induced to take any real interest in local affairs. They will not come forward themselves, nor will they take any part in encouraging and supporting suitable candidates for a place on the local authority. Thus it commonly happens that a town council is composed of much too largely, if not dominated by, ignorant, mean and vulgar men, many of whom have sought office merely to guard their own sordid interests as owners of insanitary dwellings and slum property. To give the M.O.H. permanency of tenure under such bodies will be of some advantage to him, but will not entirely guard him against bullying and persecution which it will take much strength of character to withstand. I quite agree that it would be an enormous advantage to the nation if the sanitary administration were directed by a Minister of Health and worked by a body of medical civil servants. But it must be borne in mind that this would be quite contrary to what are called the democratic principles of the day. We seem pledged to the idea of Government "of the people, by the people, for the people." We are more and more democratising all our institutions; but it is evident that democratic institutions cannot be properly constituted nor carried on efficiently unless every decent citizen will take his share in establishing them and in forming a body of public opinion which they must regard. In this country our public bodies are, I am convinced, entirely free from the corruption which marks similar bodies in some of the states of America, but we suffer here from inefficiency and mal-administration enough to clog the wheels of social progress. The hope has been

expressed in your columns lately by more than one writer that the cleansing fires through which our nation is now passing will, after the war, find us a people, with conscience aroused to the claims of public service and self-sacrifice for the advantage of our fellow-countrymen. If this hope be realised and a true democracy be evolved, there will be no need to safeguard the M.O.H. in the performance of duties, the value of which will be universally understood. This letter would gain no strength from addition of my name, and for several reasons, which I am sure you will appreciate, I beg to be allowed to subscribe myself as on previous occasions.

Yours truly,

An Urban M.O.H.

February 17th, 1916.

MIDDLE EAR DISEASE.

To the Editor of The Medical Press and Circular.

Sir,—On January 26th last you published a very interesting letter from Dr. Frank E. Miller, of New York, on "A simple method of aborting middle ear inflammation and infection leading to mastoid trouble." I would like to say that I thoroughly support his opinion, and have long contended that if the general practitioner were to study his ear work better before entering general practice he would be able to avert many of the more serious ear troubles. Having all my professional life taken a special interest in the subject, I am in a position to state that I have never during the last twenty-five years had a case of acute aural inflammation drift into mastoid trouble, not even perforation, in cases in which I have been called in early when the patient is suffering from pain.

All ear cases, in my experience, can thus be prevented from drifting into the more serious state if treated sufficiently early by a competent medical man.

I think, however, that Dr. Frank Miller seems to imply that all cases of myringitis would drift into this state if not so treated. Personally my own experience has taught me to regard these cases of myringitis, which have their origin from within, namely, which are an extension of inflammation of the middle ear, caused generally by eustachian obstruction, as being much more serious than those that commence on the external ear side and which are best treated as Dr. Miller states.

If, however, the trouble is due to eustachian obstruction, as evidenced not only by redness and inflammation of the tympanum, but also by a bulging of the membrane as shown, by the dulness of the membrane and by its convex instead of concave appearance, then the only proper treatment is to incise the drum.

I am accustomed to make this incision at the posterior half of the membrane, and to extend the incision as low down as possible so as to get a free drainage. In one case, the daughter of an M.P., whom I was called in to see in my general practice suffered from intense ear-ache. On examination, I found that the drum had perforated quite recently at the upper anterior third of the membrane. I at once advised that an incision should be made into the drum. The opening being too small to drain, and in a bad position, I had to make a circular incision, backwards and downwards, thus involving an incision nearly two-thirds of the drum in extent. For some time I was very anxious that the wounded membrane would not heal, but my courage was rewarded, for in three weeks the drum was quite healed and the patient returned home with practically a perfect drum and perfect hearing.

Another case was a boy who came to me only the other day with a profuse discharge from both ears. I quite thought that both drums must be perforated. I cleaned out the ears and blew in a little protalgin powder and boracic powder, and in three days' time the ears were practically free from discharge, although the drums were very congested. If the external inflammation of the ear had not been treated, no doubt the inflammation might have spread through the drum to the middle ear, but the inflammation does not easily go through the tough membrane in these cases.

A third kind of inflammation that I have seen is that which commences in the middle of the three membranes of the tympanum—viz., in the fibrous portion. I remember seeing a case of a boy from France who had been attended by some French doctors for a little ear trouble; whether he had it then, I don't know, but when I saw him he had myringitis with a small polypus growing from the head of the malleus. Removal of the polypus at once stopped the inflammation of the neighbouring tympanic region.

Unless some differential diagnosis is made as to the origin of the myringitis I cannot but feel that the patient runs a risk of having mastoiditis, in spite of the palliative local treatment only.

I am, Sir, yours truly,

W. T. Gardner, M.B.Lond.

Bournemouth.

February 17th, 1916.

INFANTILE MORTALITY.

To the Editor of The Medical Press and Circular.

Sir,—Writing of the high mortality among the male babies, you say, this week, that the most obvious theory explaining it is "that boys, being much more highly organised than girls, succumb much more readily to unfavourable environment." Certainly the genital eminence and ridges and folds reach a farther stage of development in the male than in the female, and the testes descend farther than the ovaries. But, apart from these details, does organisation advance any farther in the male than in the female? I think not; and, in my opinion, the difference between the sexes in the resistance they offer to the environment is physiological rather than morphological. It may be expressed in the formula that in the female anabolism predominates over katabolism more than in the male. In other words, the female keeps a larger balance of protoplasm in the physiological bank than the male does all her life, and between puberty and the menopause she often has some to spare for investment (in the form of a baby) as well. She may eat less than the male, but her metabolic processes are less active, she breaks up less protoplasm and excretes less accordingly. Thus her physiological balance is more stable, and she resists the attacks of her environment more successfully than the male.

A girl comes to maturity quickly; after puberty she produces an excess of protoplasm above her own needs. This is expressed in the menstrual flow until pregnancy begins. Then the surplus goes to form the fœtus. After labour it forms the milk supply until the next pregnancy begins. So it goes on until the menopause, after which there is often enough to form a good deal of fat. And then she lives far longer than a man, as any insurance office can tell!

Women are really much more resistant than men. They tolerate indoor life and prolonged work much

better than men. They recover from disease, injury and surgical interference much better. Nothing that we can do will make male infants as difficult to kill as female infants. Also the males have larger heads and thus get more injured during birth than their sisters. However, unfavourable environment increases the proportion of male births. So that if the war goes on long enough to cause actual privation the balance between the sexes may be more or less restored. I am enjoying your "sinapisms" every week; they are most refreshing.

I am, Sir, yours truly,
W. E. FOTHERGILL.

337 Oxford Road, Manchester.
February 19th, 1916.

TESTIMONIAL TO DR. J. POWER.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Now that the question of certification under the National Health Insurance Act has been settled, we desire to bring to your notice a proposal which was adopted at a meeting of the Medical Profession held recently in Waterford, namely to inaugurate a testimonial to Dr. J. Power, Ardfinnan, in recognition of his valuable and well-known services in connection with the above settlement.

A Provisional Committee was appointed for this purpose, and it was suggested that subscriptions be limited to £1 1s.

The Committee trust that you will promptly respond to their appeal, and give the movement your earnest support.

Dr. Jellett, 11 Beresford Street, Waterford, has kindly consented to receive subscriptions, which should be forwarded without delay as the Fund will be closed on March 17th next.

Signed on behalf of the Provisional Committee,
P. STEPHENSON.
Hon. Secretary.

Carrick-on-Suir.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF OBSTETRICS.

MEETING HELD FRIDAY, DECEMBER 17TH, 1915.

The President, GIBBON FITZGIBBON, M.D., in the Chair.

PUS TUBES REMOVED FOR THE CURE OF STERILITY.

DR. HASTINGS TWEEDY showed a case of above where he had resected both tubes and inserted a piece of No. 1 chromicised catgut in the lumen.

Sir WILLIAM SMYLY said the tubes appeared to be tuberculous. If that were so it showed that pelvic tuberculosis was a very localised and chronic condition.

Dr. SHEILL suggested a further improvement in *technique* by passing a double thread of fine catgut through the tube by means of a forked probe, splitting the stump of the tube and suturing each flap together with one of the ends of gut to each side of the ovary so as to embrace it. He considered a false passage made in passing the gut as of little importance.

Dr. GIBSON asked how Dr. Tweedy knew that the catgut lay in the lumen of the interstitial portion of the tube. His difficulty in these cases was to get the chromicised catgut to pass along through the lumen of the tube without making a false passage, and this was particularly so when it reached the interstitial portion. He had bisected the uterus after passing the catgut, and even then he could not be sure that the catgut was in the lumen.

INFANTILE TETANY.

Dr. SPENCER SHEILL read a paper on the above subject.

Dr. ELLA WEBB said that care should be taken to define tetany definitely, as Dr. Sheill's cases appeared to resemble convulsions from causes either of a toxic or irritative nature. The question was whether cases with the following symptoms could be named tetany:—Slight tonic spasm, with occasional spasm such as flexion of the forearm or thigh, the movements in the latter being increased by pressure. It seemed as if tetany, as described in the text-books, took an intermediate place between definite convulsions and these slight spasmodic contractions.

Dr. SHEILL, in reply, defined tetany as spasms of face and limbs without loss of consciousness. He considered tetany to be a mere symptom of some ailment, and to be a stage less than true convulsion and a stage worse than simple spasms.

THE ORIGIN AND BOUNDARIES OF THE LOWER UTERINE SEGMENT.

Dr. HASTINGS TWEEDY read a paper on the above subject. He claimed that there was now sufficient data available to clear up the mystery in connection with this anatomical structure. The endoperitoneal tissue formed the true boundary between the cervix and body and constituted the tendonous extremities of the uterine fibres. Until this tissue had been put out of action either by rupture or by opening of the os internum there could be no pressure exerted on the cervix. He showed that the dilatation of the internal os was an early phenomenon of pregnancy, and that this dilatation permitted the ovum to pass through and press directly on the cervix. Continuous pressure on the cervix caused a rapid hypertrophy, and this law obtained in the unimpregnated as well as in the pregnated uterus. The cervix did not stretch, but grew, and the growth of the lower uterine segment had its complete counterpart in the growth of the supravaginal portion of the non-pregnant "procidentia uteri."

Sir WILLIAM SMYLY said that most of the ideas in the paper were new to him, and he could not immediately make up his mind as to how far they would conform to the established facts, though, to a large extent, they appeared to do so. As regarded the origin of the lower uterine segment the communication left the arguments depending on the histology of that part unaffected.

Dr. ASHE said that the opening of the pelvic fascia was more rigid than was usually imagined. The uterus fitted into this as a hanging hinge. The elongation of the cervix in cases of prolapse was due to a piping of the uterus, which was driven down, whilst at the same time the cervix elongated.

Dr. KIDD said he would wish Dr. Tweedy to reconcile one or two practical points with his theory. Firstly—In cases of elderly primiparæ, if hypertrophy of the cervical zone took place instead of elastic distension, why was there more tedious dilatation in elderly primiparæ than in young primiparæ? Secondly—In cases of "rigid os," where the cervical zone was so thinned out that it was very difficult to say the position of the os, how could he reconcile that with hypertrophy of cervical zone? Thirdly—When premature rupture of membrane occurred labour would be prolonged in first stage because the "hydrostatic dilation"

was lost. Did not that circumstance point rather to an elastic distension than a hypertrophy?

Dr. Sheill considered the theory advanced to be very ingenious, but queried if this growth, due to sustained pressure, could account for hypertrophied cervix in virgins following increased abdominal pressure from tight lacing and constipation.

Dr. Gibson said the supra-vaginal portion of the cervix adapted itself to pregnancy just as the body did. The growth of the cervix began, however, long before labour commenced. I could be recognised after artificial dilatation of the cervix during the seventh month.

The President said that the original controversy over Bandl's and Müller's rings was left in an undecided position, and was still undecided. Dr. Tweedy supported Bandl's view, and the explanation which he offered for the formation of the lower uterine segment out of the upper dilated portion of the cervix seemed very plausible and to be what was required to give preponderance to the one theory over the other. He (the President) concurred with Dr. Tweedy in his view of the structures.

Dr. Tweedy replied.

NEW LONDON DERMATOLOGICAL SOCIETY.

Meeting held February 10th, 1916.

Dr. Alfred Eddowes in the Chair.

Cases.

Dr. Samuel: A case for diagnosis. A middle-aged woman having an ulcerating lesion under the right eye suggesting a breaking-down rodent ulcer, a number of so-called sebaceous senile warts, and some lesions looking like developing rodent ulcers; on the back one pigmented pedunculated lesion. The question arose whether it was a case of multiple rodent ulcers or epithelioma adenoides cysticum.

Dr. Vinrace suggested that if one noted the transitional stages the condition could be followed from its earliest inception to the development of the largest mole. He thought the lesion specially referred to had undergone some change due to traumatism; possibly the lancet which the patient said had been used. He recalled a case of generalised psoriasis which he showed at the last meeting, in which, beneath the clavicle, there was a patch which looked like epithelioma. Since he showed the case, that had healed, and left a sound surface. He thought that this would heal, too.

Dr. Sequeira said the tumours were multiform in character and that the lesion below the right eyelid was rodent ulcer; it had the typical edge.

The President regarded the case as very interesting because it exhibited a number of epithelial lesions of seborrhœic origin behaving differently according to site. The one on the face resembled rodent ulcer; it was on a common site for that condition. He had investigated a case of epithelioma adenoides cysticum, of which he showed a section and drawings at the British Medical Association meeting at Oxford. There was a marked difference between that case and rodent ulcer.

Dr. Samuel replied that the great characteristic of epithelioma adenoides cysticum was the multiplicity of the lesions, which, clinically, almost exactly resembled rodent ulcer. It was exceptional for rodent ulcer to be multiple, and the other disease did not spread and recur, and might exist for years without ulcerating. It was early yet to say whether there would be ulceration in this case. The lesion under the eye certainly seemed to be rodent ulcer.

Dr. Eddowes: (1) A young woman with an extraordinary degree of redness and slight swelling of the face over the area usually affected with rosacea. On the forearms were some erythematous patches with central nodules. She stated that a few days ago her face was so swollen that she could not see out of her eyes.

Dr. Sequeira thought the case was one of erythematous eczema of the face. When eczema attacked the face and the leg it often assumed a ruby-red aspect, and this patient's swelling of the eyelids he regarded as very characteristic of that condition.

Dr. Samuel said one could not quarrel with the diagnosis of erythematous eczema. He considered there was a big dyspeptic element in the case. It was, in his view, the rosacea type of dermatitis.

Dr. Vinrace considered that the skin condition was due to deficiency of circulation, and tending ultimately to lupus erythematosus.

The President (Dr. Eddowes) regarded all the remarks which had been made on the case as valuable. The nodules on the arms were important, but there was no tubercular history in her case. She might develop lupus erythematosus, which sometimes was ushered in in this violent way.

Dr. Samuel: Case of mycosis fungoides. The patient, a middle-aged man, has had the condition 18 years, and has been to a number of hospitals with it. It started in a pre-mycotic eczematous stage, and several pre-mycotic tumours have been removed by X-rays, but the rays did not stop the tumours coming out elsewhere. He has been a widower four years, and has two healthy children; both they and his late wife having had apparently healthy skin. At one hospital his lesions were treated with the actual cautery.

Dr. Mack thought the use of the X-rays had prolonged the patient's life.

Dr. Sequeira said there were cases on record in which the tumours had undoubtedly cleared up under the influence of X-rays.

Dr. Vinrace remarked that a noteworthy point was the rapid development during the last four years.

Dr. Samuel replied that X-rays had been applied during the last fourteen years to different parts of his body.

Dr. Vinrace: Case of epithelial growth on the nose. The patient, a man over 80 years of age, has had an almost stationary epithelial growth on the nose fifteen years. A crust of *débris* gradually formed, and when removed from time to time left a slightly bleeding surface.

Dr. Samuel thought the lesion was probably a rodent ulcer, judging by the history of commencement, and what happened when the crust was removed. He suggested freezing with CO_2 snow.

The President said the lesion seemed superficial and crusted, like a chronic folliculitis.

Dr. Sequeira recommended the simple application of acid nitrate of mercury.

Dr. Mack said the case was almost like one he showed of lesion of the forehead of seventeen years' duration, which crusted in the same way. On removing the crust it left a slightly ulcerated surface.

Dr. Vinrace replied that he had regarded it as a very slow-growing epithelioma.

Dr. Eddowes: (2) Purpura (peliosis) rheumatica in a young girl. The eruption, consisting of patches varying in size from that of a pea to that of a shilling, covered both legs, was plentiful on trunk, and even a few showed on the face. The usual pains were complained of in legs. The patient has been very subject to "colds" in the throat; tonsils have been surgically treated, but are still ragged and catarrhal. Dr. Eddowes believed they were

the chief source of toxin in this case, and advised their early enucleation. He added that on the previous day the rash was very extensive, and most of the patches were dark, but they had since become much paler, the mouth was cleaner, and the tonsils showed improvement under treatment. He only saw the case yesterday for the first time. The patient had been confined to bed, and was reported to have been feverish, and to have had much pain in the legs.

Dr. SAMUEL agreed it was purpura, but thought it did not agree with the description of peliosis rheumatica.

Dr. SEQUEIRA regarded the case as a typical one of peliosis rheumatica; the history pointed to it, and, in his experience, the eruption in that condition was not, as Dr. Samuel had said, confined to the joints; if it occurred in the leg it was distributed all down the leg.

Mr. VINRACE asked what were the evidences of acute rheumatism in this case.

Dr. MACK thought this would prove to be a toxic purpura. He thought there were symptoms in this case which could be referred to rheumatism.

Dr. EDDOWES replied that when seen the previous day the patient still looked ill and complained of pains in the limbs. Patients with catarrhal tonsils frequently complained of pain in the limbs, and it was reasonable to regard the condition in this case as starting in the tonsils. He thought Dr. Samuel took a certain text-book view; but many authorities had a wider conception. Rashes did not follow hard and fast lines—for example, fatal scarlet fever could occur without rash. He saw a little girl during the last epidemic of small-pox who had purpura in the groin, but the child looked remarkably well, and had probably picked up some ptomaine poison. Somebody who differed from him sent the case to a small-pox hospital, but it was returned in 48 hours, well. There the effect of the "toxin" (ptomaine) was only temporary.

HARVEIAN SOCIETY OF LONDON.

MEETING HELD FEBRUARY 3RD.

The President, DR. EDMUND CAUTLEY, in the Chair.

AN interesting selection of cases were shown and demonstrated by Drs. LEONARD GUTHRIE and FEARNSIDES.

(1) A soldier with cauda equina lesion due to shrapnel wound, having complete loss of power in left and paresis of right leg; the chief feature of the case being attacks of intestinal obstruction and loss of control over bladder and rectum.

(2) Man, æt. 56, suffering from lesion of corpus striatum, the symptoms commencing with eccentricity and suicidal tendencies, and developing into dumbness and inability to move the limbs, which are the seat of contractures. The reflexes are present, he takes no notice of his surroundings, but has incontinence of urine and fæces.

(3 and 4) Soldiers with limitation of visual fields resulting from wound in parieto-occipital, and occipito-mastoid regions respectively.

(5) A case of tabes dorsalis with Charcot's knee-joint.

(6) A case of reflex spasticity following bullet wound near spine at level of 10th rib.

(7) Myopathy with contractures in a woman æt. 19.

(8) Mental amblyopia in a woman following insomnia, the optic discs being normal, but fields very contracted.

(9) A case of disseminated sclerosis sent in to the hospital as hysteria.

(10) A case of cervical amyotrophic lateral sclerosis in a female æt. 50.

(11) Case of optic neuritis probably due to cerebral tumour.

The PRESIDENT and Dr. WILFRID DAVSON also showed a case of considerable fatty enlargement of the legs and arms in a young woman, the feet, hands, and the rest of the body being unaffected.

OBITUARY.

DR. R. G. ALEXANDER, M.A., M.D., J.P., HALIFAX.

THE death of Dr. Reginald G. Alexander, M.A., M.D., J.P., will leave a notable gap in Halifax circles—medical, social, literary and philanthropic. He was the descendant of a family which has been prominent in the annals of Halifax for a couple of centuries past. During that time the heads of the family have been actively identified with the medical profession, his father (Dr. William Alexander), his grandfather (Dr. Gervase Alexander), and his great-grandfather (Dr. Robert Alexander), all practising in the town in their day. The family's long and honourable association with medicine is continued in the person of the deceased's eldest son, Dr. Gervase Alexander, who pursues his calling at Bodmin, in Cornwall.

Dr. Alexander was educated at Shrewsbury and Cambridge. He graduated M.A.Cantab. in 1874. He received his medical training at Cambridge, King's College, London, and Edinburgh, taking the M.B., C.M.Edin. in 1871, and M.D. in 1881. He was also a Fellow of the Linnean Society. He was a county magistrate, and in the year 1885-6 he was chosen by his medical colleagues for the position of President of the Yorkshire Branch of the British Medical Association, while he also held the position of Consulting Physician to the Lords of the Admiralty for Yorkshire. His connection with the Royal Halifax Infirmary as a member of the hon. medical staff extended from 1886 to 1912, and the family's keen interest in this local institution is indicated by the fact that father and son between them gave their services over the long and unbroken period of 72 years. The deceased also held a similar position at the Royal Infirmary, Bradford, from 1886 to 1912. He was one of the claimants in a recent peerage case, and was declared co-heir of the baronies of De Burgh, Cobham and Strabolgi. The late Dr. Alexander died at the age of 68 years, and the end came quite suddenly from heart failure. He leaves two sons and two daughters.

DR. J. F. STURROCK, M.B., C.M., J.P., BROUGHTY FERRY.

THE death occurred on February 13th, at Broughty Ferry, of Dr. J. F. Sturrock, a well-known local practitioner, after a somewhat protracted illness. He was a native of Montrose, and graduated M.B., C.M. in 1885, at Edinburgh University. He went to Broughty Ferry about thirty years ago. When Broughty Ferry was a separate burgh, Dr. Sturrock was Medical Officer of Health, and he otherwise interested himself in public affairs, being a member of the School Board for several years and Chairman for a term.

DR. C. LAKIN, L.R.C.P., L.S.A., J.P., LEICESTER.

THE death has occurred of Dr. Charles Lakin, of London Road, Leicester.

Dr. Lakin underwent an operation for a serious internal malady, and after lingering for eight days, died on February 10th. He was sixty-seven years of age.

Dr. Lakin was not only one of Leicester's best-known medical practitioners, but was also one of its most noted public men. In 1885 he was elected a member of the Leicester Town Council. He retained membership of the Council until his death, and in 1892 his

zealous work was rewarded by his elevation to the aldermanic seats. In 1908 Alderman Lakin reached what is recognised as the zenith of a municipal career, when he filled the office of Mayor, a post which, with the aid of Mrs. Lakin, he filled with a dignity which stamped his year of office a most successful one. Dr. Lakin received his medical training at Queen's College, Birmingham, qualifying L.R.C.P.Edin. in 1872. In 1899 he published a work on "Some Medicinal Plants of Leicestershire."

SURGEON MAJOR-GENERAL PINKERTON, M.D., F.R.C.S., GLASGOW.

The death is announced at Glasgow of Surgeon Major-General John Pinkerton, a retired officer of the Indian Medical Service and Honorary Physician to the King. General Pinkerton, who was in his eighty-fourth year, graduated M.D. at Glasgow University in 1855, and immediately afterwards entered the Indian Medical Service, in which he remained until his retirement in 1893. During his stay in the East he held a number of important appointments, and was with the forces in the Persian War. After his long career in the Army he returned to Glasgow, where he took little part in public affairs, although showing an interest in matters connected with the University.

SURGEON-COLONEL E. A. GIBBON, HIGH SHERIFF OF CO. WEXFORD.

We regret to note the sudden death of Surgeon-Colonel Edward Acton Gibbon, which occurred at his residence, Sleedagh, Co. Wexford, on the morning of the 15th inst., at the age of 82 years. Colonel Gibbon obtained his qualifications from the Royal Colleges of Ireland as long ago as 1860. He spent twenty years in the Army Medical Service, many of which were spent in India. He retired in 1881, and settled to the life of a country gentleman in County Wexford. He was active in local public affairs, and was a magistrate for the county. He was serving in the office of High Sheriff in the present year. He leaves three sons, two of whom are serving in the Royal Army Medical Corps.

DR. G. H. CHARLESWORTH, M.D., M.R.C.S., L.R.C.P., D.P.H., PUTNEY.

Dr. George Henry Charlesworth died on February 8th at the age of 56, at his residence, White Lodge, Upper Richmond Road, S.W. Receiving his medical training at Charing Cross and King's College, he qualified M.R.C.S.Eng. in 1886 and L.R.C.P. in 1887. He graduated M.D. (Brux.) with distinction in 1889, and took the D.P.H., R.C.P.S.Lond. in 1893. He was for many years district medical officer to the London County Council, hon. medical officer to the Actors' and Music-hall Artists' Associations, and medical referee to several prominent insurance companies. He was late hon. consulting medical officer, resident medical officer and assistant medical officer to the Wandsworth Provident District, and assistant demonstrator in practical chemistry and pathological assistant to the Charing Cross Medical School.

Dr. Charlesworth was well known throughout his profession, and was held in the highest regard by his very large circle of acquaintances and friends. He was exceedingly popular, both as a doctor and as a magistrate on the bench, and his early death is deeply regretted by his friends, patients and colleagues.

DR. NATHANIEL E. ROBERTS, M.B., C.M., D.P.H., LIVERPOOL.

Dr. Nathaniel Roberts died on February 19th at Menai Bidge. Deceased had an interesting career. In his youth he was employed as a pork butcher at Bangor. By industry and perseverance he qualified as a chemist and later proceeded to Edinburgh to prosecute study in medicine. He qualified M.B., C.M. in 1879, and 1892 took the D.P.H. of the Edinburgh Colleges. Settling in Liverpool, he became Medical Officer of the Toxteth Park Union. He later was Visiting Physician to Grafton Street and Park Hill City Hospitals and Assistant Medical Officer of the Port of Liverpool. He was also Lecturer on Infectious Diseases and Vaccination at Liverpool University. He held the rank of Lieutenant-Colonel, R.A.M.C. (T.F.).

SPECIAL REPORTS.

MORE DOCTORS FOR WAR WORK.

The following circular letter has been issued by the Local Government Board to County Councils, Metropolitan Borough Councils, Sanitary Authorities (including port sanitary authorities), Joint Hospital Boards and Committees, and Joint Committees for Appointing Medical Officers of Health:—

"I am directed by the Local Government to state that it has become necessary to make provisional arrangements for enabling every medical man of suitable age (45 and under) who can be spared from civil employment without serious injury to the civil population, to place himself at the disposal of the authorities, and to be prepared, if required, to take a commission in the Army or Navy in the near future. A representative committee of the medical profession, known as the Central Medical War Committee, has been formed to facilitate the carrying out of this object. This Committee has asked the Board to supply them with a list of doctors of military age who are engaged in public health work of local authorities, classified as follows:—(1) Those who could be spared almost at once; (2) those who might be spared later; (3) those who cannot be spared. To enable the Board to comply with this request they will be glad if the authority will take the matter into their immediate consideration and supply the Board with the information indicated on the enclosed form.

"The authority, in considering the matter, must bear in mind the special importance of maintaining the public health at the present time, but, subject to this, they should be prepared to allow medical men of military age who are in their service to join the forces. In some areas a reduction of staff may be rendered feasible by co-operation between the county and district authorities, or between neighbouring authorities. I am to add that by arrangement with the War Office applications for commissions from medical officers of public health authorities are referred to the Board for their concurrence or otherwise, and in view of this arrangement the Board think that all such medical officers may properly enrol themselves under the scheme of the Central War Committee."

For damage to the Royal Pavilion estate while a hospital for Indian troops Brighton has received £4,077.

Dollis Hill House, Willesden, where Gladstone stayed frequently when Prime Minister, has been opened as a military hospital.

The Lord Mayor, who was accompanied by the Lady Mayoress and the Sheriffs, opened on February 7th a war hospital supply depôt at Muswell Hill.

Mr. Lawrence Read, formerly of 18 Hanover Square, W., dental surgeon, left £1,000 to the Benevolent Fund of the British Dental Association.

The Duke of Connaught, on behalf of the British Red Cross, has accepted an ambulance presented by the British Empire Association of the State of Illinois.

A new phthisis pavilion has been opened at the Mill Lane Hospital, Liscard. The new pavilion, with its spacious verandahs with a southern aspect, has sleeping accommodation for eleven male and eleven female patients. The total cost has been £2,300, towards which the Local Government Board has contributed half.

SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

Specially compiled for THE MEDICAL PRESS AND CIRCULAR.

Mercurial Poisoning from a Vaginal Douche.—Foskett (*Amer. Jnl. Obs.*, lxxii., 4) reports a case of acute poisoning and death from the use of a very strong solution of bichloride used as a vaginal douche, although pain was felt and treatment sought very soon. The case is instructive in showing the danger of advising patients to adopt methods of treatment without giving full instructions where there are dangerous poisons to be used. The physician who was consulted after the douche had been given apparently only ordered further treatment in the way of douching and ointments to be carried out by the patient on herself, as a result of which the initial poison was not removed. This goes to show the futility of self-administered vaginal douches for the purpose of removing discharge or other material from the vagina. F.

Prolapse of the Vagina, Traction Elongation of the Cervix, Prolapse of the Uterus, etc.—Keyes (*Amer. Jnl. Obs.*, lxxii., 4) says that the multiparous uterus is very prone to undergo some true traction elongation, without or with some prolapse of the corpus uteri. Vaginal traction on the cervix may cause either elongation or prolapse of the uterus. If the upper pelvic floor supports are normally strong it requires considerable vaginal traction to pull permanently down a uterus held in place by an intact and elastic periparametrium. The upper floor segment with the normal acute or right angle successfully hinders secondary prolapsus uteri, and vaginal traction, if present, may cause true traction elongation. The uterus, though retroverted, may still be held at the normal height by its own supports. Prolapsus uteri is divided into (1) primary nulliparous, (2) parous, (3) combined primary and secondary, (4) purely secondary in the parous. In the virginal and nulliparous primary prolapse the absence of cystocele and rectocele forces one to seek other causes—*e.g.*, congenital periparametric weakness. In the primary parous prolapse the acquired upper floor segment weaknesses due to childbirth are the most important. An enlarged sub-involuted uterus of itself seems to have little influence in causing prolapse. Not the least among the causes of prolapse is the premature application of forceps and tearing of the para-uterine and para-vaginal tissues of the upper floor segment. In purely secondary prolapse the upper floor segment is at first normaliy resistant, and the descent may be very gradual, taking years to come down to an appreciable degree. Treatment is considered under prophylaxis in pregnancy and labour and by oblique episiotomy to save the lower pelvic floor segment. The true principle of operation is to reunite the recto-vesical fasciæ and levator muscles, and in anterior colporrhaphy the recto-vesical fascial supports of the bladder. The lower segment operations alone suffice in those cases in which the cervix is still maintained at its proper height. The vaginal interposition of Schauta is often placing too much reliance upon the anterior portions of the upper floor segment and recto-vesical fascia without sufficient regard to posterior portion. F.

Sodium Citrate for Direct Blood Transfusion.—Schildecker (*Amer. Jnl. Obs.*, lxxii., 5) describes a method and container for taking blood from the donor and preventing coagulation by the addition of sodium citrate. The method appears simple, and for it, it is claimed that the whole procedure is visible, no hurry is necessary, the exact quantity of blood taken is measured, it does not require much experience to use it, and it can be followed in a private house. F.

Nephrectomy during Pregnancy.—Schmidt (*Surg., Gyn. and Obs.*, xxi., 6) records a case in which the patient was 6½ months pregnant at time of operation. The kidney had evidently ceased to function and was discharging pus only into the bladder. The immediate result was uneventful, and delivery occurred normally at term of a living child. Thirty-four other cases are collected and tabulated. The total mortality was two cases. Twenty-one cases were operated upon in the third, fourth and fifth months, and 77 per cent. had normal deliveries at term. The after-condition of only one kidney is not considered a bar to pregnancy, provided the one kidney is healthy and some time has elapsed since the nephrectomy without evidence of disease. F.

Hæmorrhage in Newly-Born Babies. — Manning (*Archives of Pediatrics*, November, 1915) records the cases of six babies who suffered from various forms of hæmorrhage shortly after birth. In five of the six cases blood was vomited and passed by stool, while in the other case the bleeding took place from the wound resulting from a circumcision. All the patients were treated with some form of blood serum. Horse serum, anti-streptococcic serum, and anti-diphtheria serum were used in various cases, and two patients were treated in addition with serum derived from their father's blood. Two of the six patients died, one of whom had an intracranial bleeding, and in the other numerous small ecchymotic spots were found along the course of the intestine, which, however, was not ulcerated. Cultures from the heart and umbilical vessel of this latter child showed a streptococcic infection. Manning concludes that blood serum therapy at present offers the best hope of success in the treatment of this distressing condition, but that there appears to be no reason why other forms of treatment should be entirely discarded. K.

Source of Error in the Use of Esbach's Albuminometer.—Jones (*Glasgow Med. Jnl.*, January, 1916) points out that urine that is strongly alkaline may fail to give a precipitate with Esbach's reagent even though the urine may contain large quantities of albumin. He records the instance of a urine which was strongly alkaline, and which, with various tests, showed that it contained a considerable quantity of albumin. Esbach's reagent and this urine, mixed in equal proportions, gave a cloudy precipitate, which disappeared on being shaken. On allowing this urine, mixed with the reagent, to stand in the albuminometer for twenty-four hours, no precipitate was produced. The mixture, which was already acid in reaction, was more highly acidulated with citric acid, and the result was a copious deposit of albumin, which, on standing for twenty-four hours, registered "S" on the measured glass. Jones concludes that this case demonstrates the importance in testing of being careful as to the reaction of urine, and of not trusting to a reagent such as Esbach's as being sufficient, at least in small quantity, to precipitate albumin. K.

Concussion Blindness.—Ormond (*Jnl. R.A.M.C.*, January, 1916) states that he has treated a number of patients suffering from this distressing condition by suggestion and in every case with marked success. He points out the importance of the early treatment of such patients, and that if this cannot be done their condition should not be prejudiced unfavourably by injudicious handling. The most resistant case that came under his care was that of a man who, as the result of an explosion, had remained unconscious for six days. On recovering consciousness he was blind, completely deaf, and unable to speak. He had been

told by an aurist that he would never regain his hearing, and concluded that the blindness would also be permanent. Under treatment his sight and speech have returned, and there is reason to expect that improvement in his hearing will not be long delayed. It is probable that the presence of sand or grit in the conjunctival sacs of some of these patients may have been the cause of the suggestion of blindness, but they were not present in all cases, and recovery took place without their being removed. When present they were all imbedded in the conjunctiva, and did not produce any irritative symptoms at the time the patients were under treatment. K.

Toxicity of Emetine.—Peyman (*Jnl. R.A.M.C.*, January, 1916) points out that medical officers treating patients with amœbic dysentery by emetine would do well to remember that the drug is very costly; that if it is going to do good its beneficial action is generally quickly apparent; that it is useless, unwise and wasteful to subject patients to repeated, long continued courses of the drug; and that emetine may itself produce and keep up a certain degree of diarrhœa, and that it is important to distinguish this drug-produced diarrhœa from that caused by intestinal disease. K.

THE LATE PRINCIPAL SIR WILLIAM TURNER, K.C.B., M.B., F.R.S., EDINBURGH.

By the death of Sir William Turner, the University of Edinburgh—indeed, the academic world of Scotland—has sustained a loss it would be impossible to estimate. Though a native of England, he crossed the border in his twenty-second year, in 1854, and spent the rest of his life in Edinburgh, being successively student graduate, assistant professor, professor, and principal of the University. He was appointed assistant to the late Professor Goodsir, and in a very short time made his mark as a painstaking and careful observer and a most lucid teacher. So well was his work in this capacity done that on Goodsir's death the young assistant was appointed to the vacant post. This was in 1867. For thirty-six years he was chief of the Anatomical School of Edinburgh, and as a teacher of his subject was unequalled. In his practical work and investigations he had an infinite capacity for taking pains, and accuracy was his Shekinah. He possessed another attribute of genius—the power of attracting like-minded men to himself. Many of these men are now professors of anatomy—in fact, there are very few chairs of anatomy in the United Kingdom that are not occupied by Turner's men. Besides the work of the chair proper, he had to find scope for his administrative powers, which were of a high order. As representative for the University, then as Chairman of the General Medical Council, Dean of Medical Faculty in the University; President of the College of Surgeons, and in many other positions, he did splendid work for his University and his profession. He was knighted in 1886, and shortly afterwards received his K.C.B.

His writings were copious: on the anatomy and histology of man and the lower animals; as editor of the works of Paget, Goodsir and Robertson; as founder and editor of the *Journal of Anatomy and Physiology*. He had received almost all the possible academic honours that fall to the lot of one man.

Such a strong personality as Sir William Turner is a big asset to the university to which he happens to belong; fortunate indeed is the university that has such a man on its staff. Even in the early seventies, when the writer was an arts student in Edinburgh, Turner's name was well known to those who sat at the feet of Blackie, Tait or Masson, and rarely were interested in anything outside their own quadrangle. But Professor Turner was known to them as far passing the ordinary. He had a halo of bigness comparable to that surrounding the names of Lister and Kelvin. And at this time memories of him are stirred regarding this "buirdly," strong, kindly man whose work is now done, and his method and whole-hearted earnestness are recalled all over the world—on all the shores of all the seven seas.

MEDICAL NEWS IN BRIEF.

Oxford University Finance.

The Board of Finance of Oxford University, in a report to the Hebdomadal Council on the finances of the University in the years 1915 and 1916, state that the complete figures for the year 1915 show (including the accumulated deficits of previous years) a total deficit of £12,572. To meet the deficiency the University has at its disposal items of revenue amounting to £18,806, which it is proposed to carry to an Emergency Account. If these sums were transferred to the General Fund and applied to the extinction of the deficit, the Emergency Fund would begin the year 1916 with a credit balance of £6,233; and there would still remain to the credit of the Common University Fund a cash balance of £2,722, in addition to an investment of the nominal value of £3,519 in 4½ per cent. War Loan (1925-45). The financial position at the commencement of 1916 is, therefore, more favourable than was anticipated a year ago.

The estimate of revenue and expenditure of the University in 1916 prepared by the Curators of the Chest shows: Revenue, £29,881, as compared with £37,049, the actual revenue of 1915; expenditure, £44,078, as compared with £46,372, the actual expenditure of 1915. The apparent deficit for 1916 is, therefore, £14,197. Even on the most favourable view of the future it appears to the Board unlikely that the "emergency" revenue of the year will be sufficient to cover the deficit of £14,197. It is, of course, possible that the deficit might be met if the credit balance carried forward (£6,233), together with any "emergency" revenue realised during the year, were applied to the purpose. But in that case the University would have exhausted nearly the whole of its cash resources, and would probably find itself in a position of great difficulty in 1917 and subsequent years. The Board are most unwilling to suggest any policy which would involve the entire depletion of the cash resources of the University at the beginning of what they cannot but regard as a long period of financial stress; but they think that any final decision with regard to the policy of the future may safely be deferred for a few months

A Decree will be proposed in Convocation to create an "Emergency Relief (General) Fund."

University Students and Military Service.

The Vice-Chancellor of Oxford University has received from Major Slessor, Recruiting Officer for the Recruiting Area, the following War Office instructions: "The calling up of students who are attending examinations at a recognised University before March 31st, 1916, is to be postponed until after the examination, provided it is not later than March 31st, 1916."

Major Slessor adds that a certificate from the Head of the College—or Senior Tutor—that the undergraduate is attending an examination this term will be sufficient authority for the Recruiting Officer to withhold the notice paper calling him up till March 31st. It should be addressed to the Recruiting Officer, 47 High Street. A separate certificate is necessary for each case.

Manchester Infirmary.

The war work of the Manchester Royal Infirmary was the subject of comment at the annual meeting of the trustees, held on February 11th.

Sir Edward Donner said the past year had made extraordinary demands upon the honorary staff. They had taken over 200 military patients in addition to all their ordinary care of the civil patients. The staff had risen to the occasion, and their duties had never been more efficiently performed.

Sir William Cobbett pointed out that 308 beds had been prepared for military patients, and they were providing 42 more, making a total of 350.

Dr. Brockbank said that, with very few necessary exceptions, all the honorary staff were engaged on some form of war service, in addition to their

infirmary work. Dr. Albert Ramsbotham, who had been "Somewhere in France" since the autumn of 1914, had been mentioned in dispatches. Two others of the honorary medical staff were going abroad with the 33rd Base Hospital, which was shortly to be mobilised, and whose medical staff would be drawn almost entirely from Manchester. Some of their salaried medical staff and many other medical men trained or once resident at the infirmary would go with that hospital.

Many of the salaried medical staff were also engaged in military work in addition to their infirmary duties. Several had been in foreign service, and a few in Gallipoli.

A Proud Record.—One old resident, Lieutenant Bearn, of the Black Watch, had received the D.S.O., and was one of the few officers left, he believed, of the original number. Another old resident, Lieutenant Bedale, was mentioned by Sir Ian Hamilton in dispatches for services in Gallipoli. Lieutenant C. B. Marshall was drowned in the *Royal Edward* when she was torpedoed in the Mediterranean.

Edinburgh and its Sanatoria.

RECENTLY the Scottish Local Authority approached the Edinburgh Corporation asking them to give definite information as to the amount of accommodation they had for the treatment of tuberculous patients, in order that they might communicate with other local authorities throughout the country, who had no such provision, with the view of their being admitted for treatment if there was accommodation, so that, at any rate during the war, there should be no building or more provision for this. The matter was considered by a sub-committee of the Public Health Committee, who recommended against any other patients from outside authorities being received into the Edinburgh sanatoria. At present, while there are some vacant places, the numbers are sufficient for the depleted staff and nurses to look after, and it would be impossible to deal with more unless the staffs were augmented. In the present state of the country this is felt to be impossible. At the full meeting of the Public Health Committee on February 15th this view was adopted.

Ontario Military Hospital.

ON February 19th, at Orpington, Kent, Mr. Bonar Law opened the Ontario Military Hospital which has been established there. The cost and equipment of the hospital have been borne by the people of Ontario, and it has been handed over to the Canadian Army Medical Corps for use as a general hospital on the understanding that it is not to be confined to Canadians alone, but is to be open to any wounded soldier of the British Empire. There is accommodation for 1,040 patients. The staff of officers and nurses will be brought from Ontario, and will consist of 36 medical officers, 73 nurses, and 192 others.

Colonel the Hon. R. A. Pyne, who presided at the ceremony, explained that last year the Parliament of Ontario levied an assessment on the people of the province of an equivalent of about one farthing in the pound, which produced £400,000. With this it was decided to build a hospital in England of easy access to wounded soldiers. It was intended for the soldiers of the King, and to it any wounded soldier, be he black or white, would be welcome.

Health of Exeter.

THE Medical Officer of Health for Exeter, Dr. P. H. Stirk, in his annual report for 1914, states that the number of births registered in Exeter in 1914 was 1,193 divided as follows: 587 males and 606 females. Of this number 42 males and 35 females were illegitimate. The birth-rate was 19.76 per 1,000, being .33 higher than that of the year 1913, 4.04 below that of England and Wales, and 5.24 below that of the 97 great towns in which Exeter is classed. The corrected death-rate for England and Wales for 1914 was 13.7 per 1,000; for the 97 large towns in which Exeter is classed, 15.0; and for London, 14.4. The rate for Exeter was 12.52. The infant mortality in Exeter was 84.73 per 1,000 births, the lowest on record. The early notification of births, the advice given to parents by the Health Visitor, and the work done by the Baby's Welcome Club were the contributing features for this result. Incidentally the Medical Officer mentions that mortality among hand-fed infants is five times higher than among breast-fed infants.

The death-rate in Exeter from the seven common diseases—enteric, small-pox, measles, scarlet fever, whooping cough, diphtheria, and diarrhœa—(under two years of age) was .597 per 1,000. No case of small-pox occurred in Exeter in 1914.

A Nova Scotia Hospital.

THE University of St. Francis Xavier, Antigonish, Nova Scotia, has offered a hospital unit to the British War Office for service at the front. The unit, which will be under the command of Captain McLeod, C.A.M.C., will consist of 12 doctors, 35 nurses, and about 125 attendants. This will be the second hospital unit provided by the Province.

Sheffield's Health Bill for 1914.

THE report of the Medical Officer of Health for the city of Sheffield (Dr. H. Scurfield), on the work of his department for the year 1914, has just been issued. It is dated September last, but publication has been delayed by pressure of work at the printers.

Summarising the principal features of the public health statistics of the year 1914, as compared with those of the previous decade, Dr. Scurfield states:—"It was a heavy year for measles and whooping cough and it was an average year for scarlet fever, diphtheria, enteric fever, and diarrhœa. When we turn to other diseases there was an excessive number of deaths from cancer, an average number of deaths from tuberculosis of the lung and other tuberculous diseases, an average number from respiratory diseases, the somewhat low figure for bronchitis being balanced by a somewhat high figure for pneumonia. The number of deaths from cancer is, generally, appreciably below the English figure, but during 1914 the rate was quite up to the English figure for the last decade."

The mean estimated population for the year was 476,971. The number of births during the year was 13,004, which was less than in the previous year by 284. This figure gives a birth-rate of 27.3 per 1,000 persons living. This birth-rate is the lowest ever recorded, being 0.9 per 1,000 lower than that for the previous year, and 2.8 lower than the average for the last decade.

The number of deaths during the year was 7,790. This gives a death-rate of 16.3 per 1,000 persons living, which is the highest since 1908, and has to be compared with 15.8 for the previous year and an average of 16.3 for the decade 1904-13. The unfavourable comparison with 1913 is due to the fact that while the death-rate from whooping cough was higher by 0.35 per 1,000 in 1914, there was no diminution in the death-rate from measles as compared with the previous year.

Of the seventeen largest towns of Great Britain, six had higher birth-rates than Sheffield, ten had lower death-rates, and eleven had lower infant mortality rates.

American College of Surgeons.

DR. J. G. BOWMAN, of Chicago, Director of the American College of Surgeons, is reported to have stated recently that the college has obtained from its Fellows an endowment fund of £100,000, to be held in perpetuity, the income of which only is to be used in advancing the purposes of the college. The college has been in process of formation for the last three years. It has a temporary office in Chicago, and it is probable that permanent headquarters will be decided upon within a few days. The President is Professor J. M. T. Finney, head of the surgical clinic of Johns Hopkins Hospital, Baltimore. The college is modelled after the Royal College of Surgeons of England, and has the support, it is said, of nearly all the leading surgeons in the United States and Canada. The college, which is not a teaching institution, but

rather a society or a college in the original sense, now numbers about 3,400 Fellows in Canada and in the United States.

National Health Insurance.

NATIONAL Health Insurance Fund accounts just published show that in the period from July 15th, 1912, to January 11th, 1914, the receipts amounted to £33,391,218. The greater part of this sum represents sales of insurance stamps, the other principal item being the State contributions, totalling £5,748,150. The receipts for each of the four countries and the apportionment of the Exchequer grants are shown below:—

	Total receipts.		State grants.
England	£26,642,469	...	£4,532,089
Wales	1,740,959	...	293,814
Scotland	3,687,577	...	651,148
Ireland	1,320,213	...	271,099
Totals ...	£33,391,218	...	£5,748,150

The four Commissions paid £11,280,546 to approved societies for sickness and maternity benefits and administration expenses; £5,554,187 to Insurance Committees for benefits and administration expenses; and handed £15,313,470 to the National Debt Commissioners and £901,423 to approved societies for investment.

Prussic Acid Shells.

THE *Bourse Gazette* says that it is reported from Dvinsk that an examination of the enemy's shells proves that their cast-iron heads are grooved, and that even four or five hours after they have exploded they emit a strong odour of prussic acid. These shells explode only on striking the ground: gases permeated with prussic acid poison the Russian soldiers in the vicinity, and the men who are wounded by fragments of shell die quickly, even though their injuries may be slight.

Medical Men in Austro-Hungary.

THE shortage of doctors at the front is being remedied by the calling up of all medical men capable of military service. An order just issued by the military authorities calls up all medical men for medical examination, even the heads of hospitals or assistants in military hospitals, but who are of civil status. It is explained that all the military and civil hospitals will have to be given into the charge of such physicians as are unfit for service at the front. In the hospitals, also, such medical students and physicians will be employed as have already served at the front, but who have been discharged from military service owing to illness or wounds.

Royal College of Surgeons of England.

THREE Arris and Gale lectures on "The Influence of the Arboreal Habit in the Evolution of Man," will be delivered in the Theatre of the College, by Frederic Wood Jones, D.Sc., M.B., B.S., M.R.C.S., on Monday, February 28th, Wednesday, March 1st, and Friday March 3rd, at 5 o'clock p.m.

Two Hunterian lectures on "Links in a Chain of Research on Syphilis," will be delivered in the Theatre of the College, by Professor J. E. R. McDonagh, F.R.C.S., on Monday, March 6th, and Wednesday, March 8th, at 5 o'clock p.m.

Doctors' Certificates.

A POINT as to the doctors' certificates provided for in the regulations of the Liquor Control Board in order to obtain spirits as medicine during prohibited hours has been raised in a case heard at Workington, where Hugh M'Mullen was fined 20s. and costs and Elizabeth M'Mullen 10s for supplying spirits in less quantity than that specified for off consumption. The evidence showed that a woman bought the liquor on the strength of a medical certificate granted in November last. The chairman said a doctor's certificate that spirit was required as medicine was only good for the day of issue.

Free Death Certificates.

THE Secretary of the War Office announces that certificates of death of soldiers killed in action or dying as a result of active service are issued to those concerned by the War Office upon application free of charge. In cases in which more than one certificate is required for insurance purposes, etc., duplicate copies are supplied.

Health Visitors.

Islington's Public Health Committee is recommending the Borough Council to appoint two health visitors to assist the Medical Officer of Health in carrying out the Public Health (Measles and German Measles) Regulations Act, 1916. The commencing salary of the proposed visitors is suggested at £100 per annum, rising by annual increments of £5 to a maximum of £125 per annum.

Medical Men in France and Italy.

It is stated that in France before the war there were about 20,000 medical men, of whom 3,000 resided in Paris. It is estimated that the income of the majority of the Parisian practitioners was less than £160 a year. There are eighty medical members of the Chamber of Deputies. In Italy there are 22,700 medical men, or about six to every 10,000 of population; in Naples, however, the proportion is twelve to each 10,000 inhabitants, and in Rome there is one doctor to each 10,000 of the population.

Presentation to Dr. J. Power.

A MEETING of medical practitioners was held at the Adelphi Hotel, Waterford, recently, for the purpose of inaugurating a testimonial to Dr. J. Power, Ardfinnan, in recognition of the very valuable services rendered by him to the medical profession throughout Ireland in connection with the certification question under the National Health Insurance Act. As the settlement of this question has conferred considerable professional and financial advantages on the entire profession, the meeting was of opinion that the testimonial should command the spontaneous support of every one of its members. The following provisional committee was appointed:—Drs. M. E. Lynch, Mackesy, O'Brien, O'Sullivan, Quirke, C. Ryan, D. Walshe, P. Stephenson (Secretary), and J. H. M. Jellett (Treasurer).

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s. post free at home or abroad.

Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada. For South Africa, The Record Publishing Co., Cape Town. Messrs. Geo. Robertson and Co., of Sydney and Melbourne, are our special agents for Australia.

SMOKED HORSE.

AT a general meeting of Harrison, Barber and Co., held yesterday, the Chairman said that they had lately embarked upon two new ventures—smoked horse and sausages—made, of course, from horses which were killed in perfect health. For both there was a growing demand.

LUBECK (Banbury).—According to the *Oxford Magazine*, the number of students in residence this term is 550 (including 34 B.A.s). This number compares with 1,087 in residence at this time last year, and with 3,097 in 1914.

RED CROSS STATIONERY.

RED Cross envelopes and stationery, with designs and sketches by noted artists, are to be sold in packets at from 1d. to 2s. 6d., and a limited collector's issue at prices up to 10s. The envelope bears a design by Mr. John S. Sargent, R.A.

A CLERGYMAN'S GRATITUDE.

THE REV. GEORGE COCKBURN DICKINSON, of Worcester Park, Surrey, a Governor of Christ's Hospital, bequeathed £200 to Dr. Irwin (Belfast) for "his attention when operating on my tongue many years ago, and I wish him to be told that I feel but for his skill I must have sunk under my agony."

MUNICIPAL DISPENSING.

OWING to the high price of drugs the Brighton Council has arranged to introduce a scheme of municipal dispensing at the local tuberculosis dispensary.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, FEBRUARY 23RD.

ROYAL SOCIETY OF ARTS (John Street, Adelphi, W.C.).—4.30 p.m.: Miss H. B. Hanson: Serbia as seen by a Red Cross Worker.

HUNTERIAN SOCIETY (1 Wimpole Street, W.).—9 p.m.: Demonstration:—Dr. R. D. Maxwell: Gynæcological Specimens. Discussion invited.

WEDNESDAY, FEBRUARY 23RD, AND FRIDAY, FEBRUARY 25TH.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.—Course of Lectures on the Anatomy of the Human Body, for First-aid and Ambulance Students (open to all members of ambulance companies and first-aid classes): 5.30 p.m.: Professor A. Keith. 4 p.m. to 7 p.m.: Exhibition of Anatomical Preparations and Specimens in the Theatre on lecture days, and between 10 a.m. and 5 p.m. in the Hall of the Museum on the following day.

THURSDAY, FEBRUARY 24TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF NEUROLOGY) (1 Wimpole Street, W.).—8 p.m.: Clinical Meeting. Members who desire to show cases are requested to communicate with Dr. C. M. Hinds Howell, 145 Harley Street, W.

MONDAY, FEBRUARY 28TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF ODONTOLOGY) (1 Wimpole Street, W.).—5.30 p.m.: A Debate on "War Injuries of the Jaws and Face" will be opened by Mr. J. Lewin Payne, and an Exhibition of Dental Splints, Models, Radiograms, Photographs, and other apparatus illustrating the same subject will be open from Tuesday, February 22nd, to Monday, February 28th. The Exhibition will be open from 11 a.m. to 6.30 p.m. each day.

ROYAL SOCIETY OF MEDICINE (SECTION OF SURGERY) (1 Wimpole Street, W.).—The President and Council of the Section of Odontology cordially invite the members of the Section of Surgery to the Debate on "War Injuries of the Jaws and Face," on Monday, February 28th, at 5.30 p.m.

Vacancies.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Barrow-in-Furness, Lancaster; Fintona, Tyrone; Staplehurst, Kent.

Ingham Infirmary and South Shields and Westoe Dispensary.—House Surgeon. Salary £150 per annum, with residence, board, and washing.—Applications to John Potter, Secretary, Ingham Infirmary, South Shields.

Greenwich Union Infirmary.—Assistant Medical Officer. Salary £175 per annum, with furnished apartments, rations, and washing. Applications to the Medical Superintendent, at the Infirmary, Vanbrugh Hill, East Greenwich, S.E.

Salford Poor-law Union Infirmary.—Resident Assistant Medical Officer. Salary £300 per annum, with furnished apartments, attendance and rations in the infirmary. Applications to E. H. Inchley, Clerk to the Guardians, Poor-law Offices, Eccles New Road, Salford.

Coventry and Warwickshire Hospital, Coventry.—Third Resident. Salary £175 per annum, with rooms in the Hospital, board, laundry, and attendance. Gentlemen applying should be ineligible for military service. John A. Rudd, Secretary, Board Room, 8th February, 1916.

Hulme Dispensary, Dale Street, Stretford Road, Manchester.—House Surgeon. Salary £250 per annum, with apartments, attendance coal, and gas. Applications to Honorary Medical Secretary.

Cambridgshire Asylum, Fulbourn, near Cambridge.—Junior Assistant Medical Officer. Salary £200 per annum, with board, lodging, washing, and attendance. Applications to the Medical Superintendent.

Appointments.

ANWYL-DAVIES, T., M.R.C.S., L.R.C.P.Lond., Casualty Officer and Resident Anæsthetist at St. Thomas's Hospital.

BHATIA, S. L., M.R.C.S., L.R.C.P.Lond., Casualty Officer and Resident Anæsthetist at St. Thomas's Hospital.

BLUETT, D. C., Casualty Officer at St. Thomas's Hospital.

BRADLEY, F., M.B., Ch.B.N.U.I., Certifying Surgeon under the Factory and Workshop Acts for the Fintona District of the County of Tyrone.

CELESTIN, L. A., Casualty Officer at St. Thomas's Hospital.

DAVIES, L. M., M.R.C.S., L.R.C.P.,Lond., Casualty Officer and Anæsthetist at St. Thomas's Hospital.

HARRIS, J. C. N., Resident House Surgeon at St. Thomas's Hospital.

HENSLEY, E. H. V., Resident House Surgeon at St. Thomas's Hospital.

HIGGINS, F. E., M.R.C.S., L.R.C.P.Lond., Senior House Physician at St. Thomas's Hospital

HYMAN, O. H., Resident House Surgeon at St. Thomas's Hospital.

MARRIOTT, W., Resident House Physician at St. Thomas's Hospital.

NAIRNE, N. S., Ophthalmic House Surgeon at St. Thomas's Hospital.

ODDY, H. M., M.B., B.Ch.Oxon., M.R.C.S., L.R.C.P.Lond., Resident House Physician at St Thomas's Hospital.

PHILLIPS, P. R. O'R., M.R.C.S., L.R.C.P.Lond., Casualty Officer and Resident Anæsthetist at St. Thomas's Hospital.

ROMANIS, W. H. C., M.B., B.C.Cantab., F.R.C.S.Eng., House Surgeon and Resident Anæsthetist at St. Thomas's Hospital.

SMITH, J. FOREST, Resident House Physician at St. Thomas's Hospital.

STORMER, H. G., Resident House Surgeon at St. Thomas's Hospital.

VEY, F. H., Resident House Physician at St. Thomas's Hospital.

Births.

ADAMS.—On February 13th, at Highlands, Leominster, the wife of Charles E. Adams, of a daughter.

BAKER.—On February 13th, at Torfield House, Hastings, Sussex, the wife of Dr. A. E. Baker, of a daughter.

BOWEN-JONES.—On February 15th, at 1, Walker Road, Cardiff, to the wife (*née* Nellie Parry) of Lieut. J. Bowen-Jones, R.A.M.C., a son.

DIXSON.—On February 12th, at 51, Woodhurst Road, Acton, W., the wife of Dr. C. F. Lyne Dixson, of a son (prematurely).

GALE.—On February 14th, at Seoul, Korea, the wife of Dr. J. S. Gale—a son.

GILMOUR.—On February 15th, at West Meon, Hants, to the wife of R. Withers Gilmour, M.B., a daughter.

HAMILTON.—On February 14th, at Plas Mawr, Penmaenmawr, the wife of the late Dr. Graeme Hamilton, Ashton-under-Lyne, of a daughter.

LEDINGHAM.—On February 13th, at Yeoveney, Links Road, Epsom, the wife of Lieut.-Colonel J. C. G. Ledingham, R.A.M.C., of a son.

LUKYN-WILLIAMS.—On February 9th, at the Nursing Home, 13, Prince's Gate, London, the wife of H. T. Lukyn-Williams, M.B. (Temp. Lieut. R.A.M.C.), of a daughter.

WESTON.—On February 17th, at 2, East Ascent, St. Leonards-on-Sea, to Dr. and Mrs. H. J. Weston, a son.

Marriages.

GREIG—SCRIMGEOUR.—On February 16th, at Hemsby Parish Church, Staff-Surgeon Louis L. Greig, R.N., fifth son of the late Mr. and Mrs. David Greig, of Glasgow, to Phyllis, second daughter of Mr. and Mrs. Walter Scrimgeour, of Hemsby Hall, Hemsby, Norfolk.

DAWSON—BISSET.—On February 19th, at the West Parish Church, Aberdeen, George Forbes Dawson, Captain, R.A.M.C., younger son of William Dawson, 25 Westburn Drive, Aberdeen, to Catherine, second daughter of the late William Bisset, 38 Albyn Place, Aberdeen.

MALLAM—SOMERVILLE.—On February 16th, at St. Benet's Church, Cambridge, Capt. Dalton Mallam, R.A.M.C. (T.), eldest son of the late Dr. G. B. Mallam, of Oxford, and Mrs. Mallam, of Sparsholt, Wantage, Berks, to Jessie Muirhead Somerville, niece of Mr. and Mrs. Robert Store, of Peldon Lodge, Colchester.

STEVENSON—OWENS.—On February 15th, at St. George's, Worthing, William Sinclair Stevenson, M.D., younger son of the late Rev. William Fleming Stevenson, D.D., to Mary Dorothea, widow of George Bolster Owens, R.N.

THOMAS—COULDREY.—On February 19th, Donald C. Thomas, Lieutenant, R.A.M.C., to Norah Alice, daughter of John Henry Couldrey, Esq., of Portsdown Road, Maida Vale.

TURNBULL—BAKER.—On February 12th, at St. Mary Abbot's, Kensington, Hubert Maitland Turnbull, D.M., Director of the Pathological Institute of the London Hospital, son of Mr. and Mrs. Andrew H. Turnbull, of The Elms, Edinburgh, to Catherine Nairne Arnold, younger daughter of Mr. and Mrs. Frederick Arnold Baker, of 20 Cottesmore Gardens, Kensington, and Flutters Hill, Longcross, Surrey.

Deaths.

ALEXANDER.—On February 14th, at Blackwall Lodge, Halifax, Reginald Gervase Alexander, M.D., J.P., co-heir to the Baronies of Burgh, Strabolgi, and Cobham of Kent, in his 69th year.

HEBERDEN.—On January 23rd, at a sanatorium, George Alfred Heberden, D.S.O., M.R.C.S., L.R.C.P., of Victoria West, South Africa, in his 56th year.

HUNT.—On February 15th, at Arosa, Switzerland, George Bertram Hunt, M.D., elder son of the late George Hunt, of Lloyd's, aged 44.

MARCH.—On February 15th, at his residence, Nethergrove, Portesham, Dorset, Henry Colley March, M.D., J.P., F.S.A., formerly of Rochdale, aged 78.

PEMBERTON.—On February 15th, at Linden House, Banbury, Oxon, Clarence L. H. Pemberton, M.D., aged 80 years.

SPEIRS-ALEXANDER.—Died of wounds, on February 9th, in Mesopotamia, Alister Ralph Speirs-Alexander, M.B., B.S. Lond., Capt. Indian Medical Service, dearly loved son of Dr. and Mrs. Speirs-Alexander, Hampstead.

STOKES.—On February 10th, at Latchmere, Ham, suddenly, as the result of shell-shock in France, Lieut.-Col. John Wilfred Stokes, R.A.M.C. (T.F.), 3rd West Riding Field Ambulance, the dearly loved husband of Doris Stokes, and eldest son of Rev. A. and Mrs. Stokes, formerly of Mussoorie, U.P., India, aged 43.

TURNER.—On February 15th, 1916, at 6, Eton Terrace, Edinburgh, after a short illness, Sir William Turner, K.C.B., F.R.S., Principal and Vice-Chancellor of the University of Edinburgh, in his 85th year.

THE MEDICAL PRESS AND CIRCULAR.

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, MARCH 1, 1916. No. 9.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravants les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

Certificates.

SINCE the outbreak of war there have been a good many cases reported in the lay Press which turned on the question of medical certificates. Some of them have been provoked by mere irresponsible babble, such as that of the anonymous worthy who stated at Westminster that you could get a doctor to certify to anything (see "Periphery" of December 8th, 1915). Some of them have, however, been serious. There was, for instance, the case of the doctor who, to please a patient before the war, signed a recommendation for a passport in favour of a lady with whom he was not personally acquainted, an act of careless complaisance which got him into grave difficulties. Recently, the value of certificates for military unfitness has been much discussed; and more recently still a panel doctor has been charged with giving an insured patient a certificate of incapacity while, at the same time, advising the approved society that benefits should be withheld. This is, of course, to say the least of it, a very unmanly proceeding, and the doctor in question would surely have thought twice before adopting it had he been acquainted with the law on the subject.

Dangers.

MEDICAL men are proverbially averse to giving certificates, but they would be even more chary of appending their signatures to these documents if they realised the risk they run by uttering a certificate which is not strictly in accordance with fact. The risk entailed is no less a one than that of being struck off the Medical Register. In spite of the training in accuracy which a scientific education is believed to cultivate, medical men are often very careless in their wording of a certificate. When, as in a lunacy certificate, they are asked very definitely to state facts, they ventilate opinions, and even when they mean to state a fact, the wording is so loose as to render the statement valueless. For some curious reason certifiers seem to have an objection to the present tense of the indicative mood; they prefer the present participle. I once saw a lunacy certificate in which the doctor wished to say, "The mother states that the patient went into the street in her nightgown." Instead of which he wrote, "going into the street in her nightgown."

The Law.

BUT inaccuracy in wording may not only render a certificate valueless, it may, as I have already said, result in very awkward complications for the certifier. In a warning notice issued in November, 1911, the General Medical Council gave notice that "any registered medical practitioner who shall be shown to have given any untrue, misleading, or improper certificate, whether relating to several matters specified below or otherwise, is liable to be adjudged by them to be guilty of 'Infamous conduct in a professional respect.'

CERTIFICATES.

(a) Under any statute relating to births, deaths or disposal of the dead.

(b) Under the Lunacy Acts.

(c) Under the Vaccination Acts.

(d) Under the Factory Acts.

(e) In relation to children or to excusing school attendance.

(f) In connection with sick benefit, insurance and friendly societies.

(g) In connection with workman's compensation.

(h) In connection with Naval or merchant shipping.

(i) For procuring the issue of Foreign Office passports.

(j) For excusing attendance in courts of justice, in the public services, in public offices, or at ordinary employments."

Latin.

THE powers of the General Medical Council are thus very considerable, and medical men would do well to lay this warning notice to heart when, pen in hand, they sit down to sign a certificate. There is one matter, however, in which the powers of the Council are not as extensive as they were thought to be. Young men who study medicine in universities with a view to qualifying are required by the General Medical Council to pass a preliminary examination in subjects of general education before entering on their medical studies. The regulations of the Council have always required that Latin shall be one of the subjects of the preliminary examination. Some years ago, however, notwithstanding the regulations of the General Medical Council, the University of London

decided to admit medical students to its examinations and degrees without demanding Latin as one of the subjects of the matriculation examination. Such medical students were consequently never recognised on the register of medical students published by the Council. Nevertheless, after the necessary period of study and passing of the necessary examinations, the names of the new medical graduates were sent up to the Registrar of the General Medical Council for insertion on the Register of Qualified Practitioners. It now appears that according to the Medical Acts, although it had never recognised them as medical students, the General Medical Council cannot refuse to accept the Latinless graduates as qualified medical men.

Live Languages.

WHATEVER there is to be said in favour of a classical education—and there is a great deal to be said—it is obvious that the amount of Latin which suffices to satisfy the examiners in a "prelim" is no guarantee of classical scholarship. The "little Latin and less Greek" which it used to be necessary for students to produce represented nothing of any value, whereas the same amount of French, German or Spanish would serve as a very fair foundation on which to erect a superstructure of real familiarity later on. Complete ignorance of Latin must be a very serious drawback to anyone studying medicine, but as soon as he is qualified the need for Latin disappears. In the case of a foreign language the position is reversed. Familiarity with French, for example, is of little or no use to the student, but to the qualified man it is an inestimable boon both professionally and socially, a fact of which its possessor becomes increasingly conscious as time goes on.

The German Language.

I SEE that there is a movement on foot to discourage the teaching and learning of the German language. Medical students and young doctors will do well to take no part in this movement. I think the movement is stupid and petulant from every point of view, but from that of the scientist in any branch it is suicidal. The Germans themselves afford the most convincing proof of this. By no means their least powerful instrument of insinuation into the vitals of the political and commercial life in France and Britain has been their extraordinary familiarity with the languages of the two countries. If the Hun had not been polyglot he could never have succeeded in this colossal rattle into barbarism. As an additional precaution against the success of any future attempt of the same kind, we should encourage our young men to imitate his educational methods by familiarising themselves with his language. And more especially scientific young men, for when even the Devil's Advocate has said his worst against the Hun, there will always remain to his credit careful scientific work which is best studied in the original.

Mortality of Male Babies.

WHEN venturing my explanation of the greater mortality of infant boys over infant girls, I fully expected to "draw" somebody, but I hardly hoped to land so substantial a fish as Dr. W. E. Fothergill, whose letter, which appeared last week, p. 171, arrived too late for me to comment on. Than Dr. Fothergill no one is more competent to make a contribution to this subject, and I hope his humorous and learned letter gave much pleasure to the readers of the MEDICAL PRESS AND CIRCULAR as it did to me. Of course he is right in his contention that males are katabolic and females anabolic; and that the female baby's anabolism confers upon her a very much greater resistance to uncongenial environment than is present in the katabolic male baby. This affords a good, sufficient and an interesting reason for the difference in the respective death-rates. But I do not think it affords any argument against my view that a male is a higher evolutionary product than a female. The dormouse is surely an organisation of a lower type than the mouse who is not dormy.

Ignorance and the War.

ON the subject of child mortality in general it has often been said that ignorance is more deadly than war. The degree of truth in this trite saying has been brought out by a comparison made by Mr. Robert Parr, of the Society for the Prevention of Cruelty to Children: "In the first fifteen months of the war 109,725 soldiers and sailors were killed or died; whereas during 1913 the number of children who died under five years of age was 140,957, and of these 95,608 were infants under a year." Even if it be supposed that a certain proportion of these young deaths were quite unavoidable, the fact remains that one year's infantile mortality is greater than the havoc caused by fifteen months of the most appalling military slaughter in history. Suffragettes are fond of saying that women should be given the vote because they know more about children than men do. They do not seem to be able to apply this exclusive knowledge to any very practical purpose.

Slates and Roller Towels.

MR. L. R. TIPPINS, of Mistley, Essex, writes to *The Times* as follows:—"About thirty years ago you printed a letter from me pointing out the dangers of using slates in schools. Being before its time it was much ridiculed by some who called themselves educationists. I now write to protest against the reintroduction of the filthy practice of using slates. It would be no economy, and would not even save money. It would cost a good deal of coin and very many lives. In the light of our present knowledge no man of common sense can advocate a practice that is little short of murder." Mr. Tippins is, of course, perfectly right, and I wish him every success in his campaign. Some Medical Officers of Health pay great attention to these matters, but there are many who do not. Slates are undoubtedly very insanitary, and should be prohibited under severe penalties in every and any school. Worse even than slates, however, are those filthy and dangerous abominations known as roller towels which abound not only in schools but in hotels and even in first-class restaurants. The amount

of ringworm, ophthalmia and other filth diseases for which these relics of barbarism must be responsible it would be impossible to gauge. Sanitary authorities should suppress them with a firm and untiring hand.

Frae the North.

A friend from the North writes as follows:—"A healthy medical septuagenarian from Dennistoun, Glasgow, voices a grievance that many have felt but sat still under. There are many elderly medical men, some retired and some still going strong, who have expressed their eagerness to fall into line with the manhood of the nation and do what they can in our present neck-or-nothing national struggle. Those to whom I have spoken have had their letters recognised most politely—but that is all. Then appears a letter from Professor Ogston setting forth the great need of medical men and women. Small wonder that the 'old boys' feel sore after having offered their services and having so far only been ignored. When one notes the number of medical men who have already donned khaki and left their work behind for others to do, one can hardly believe that there is such a dearth of men as the outcry would indicate. At present there is no scarcity of surgeons or physicians in our military hospitals about here. One-quarter of the men could easily do all the work that is to be done. Our military medicals might take a lesson from the tramway department of any big town, which always has a 'break-down gang' ready to be sent to where the work is. The bulk of the work in our military hospitals at home could be done by good house-surgeons—though there now and then crops up a case where large experience is a necessity; but it does seem somewhat wasteful for surgeons of thirty years' experience, men at the head of their profession, to be doing circumcisions, operating on varicoceles (some of which could only be seen in the relaxed summer scrotum) straightening hammer-toes, etc., etc. But it fits in with the idea of that charming phrase-maker Lord Rosebery, describing our past methods as 'muddling thro'.'"

From the Front.

Another friend, in the South, sends me the following extract from a letter recently received from his son, an R.A.M.C. officer at the front:—"It is not altogether fair to criticise the existing administration. For things as they are, there is an undoubted plethora of medical and surgical personnel, but in the event of serious fighting and anything like a far-flung battle, we should all be working up to our eyes. I don't quite follow the charge of waste of energy. At the times when there has been a 'push' the demand for medical officers has always exceeded the supply, but when there is fighting you cannot run doctors up and down the country without hopelessly upsetting all organisation. As long as there is a man who is likely to be sick, be it only with a headache, there must, according to the army *régime*, always be a doctor within reach. . . . One friend of mine said he managed to keep dry in the awful rains by wearing a thin transparent oilskin under his ordinary waterproof. I have seen ladies wearing these things at home."

Organise.

The criticism which has been directed against the authorities for the want of organisation and consequent wastefulness in medical men refers not to the state of matters at the front, but to what is going on at home. The best way of utilising medical material in the fighting area is one upon which military men, and military men alone, are competent to give an opinion. The rule which provides that a doctor shall be available for anyone who is in any way sick is both humane and expedient. In its application it may seem to entail a certain wastefulness, but that is clearly unavoidable. On the question of the judicious and economical utilisation of medical officers at home, any thinking man who is in touch with such officers is capable of forming an opinion. So far, from such people I have heard but one opinion, and it is to the effect that the organisation is bad; a plethora of officers in some places and a dearth in others; surgeons put to do the work of physicians and *vice versa;* well-known operators obliged to ask permission to operate from men who, the day before yesterday, were sitting at their feet in the class-room, and so on. What is wanted is a business man accustomed to large scale organising to act as assessor to the present military authorities.

Emetine in Psoriasis.

An accidental experience with emetine hydrochloride leads a writer in *Therapeutic Notes* (November, 1915, p. 131) to believe that this remarkable remedy exerts a favourable influence upon psoriasis. The first case received a half-grain of emetine hydrochloride by hypodermic injection for a severe alveolitis. Soon after the injection the skin manifestations, which were, of course, of longer duration, began to disappear. Three cases of psoriasis have been treated with emetine with highly satisfactory results. Even the most experienced dermatologist has often had to confess himself defeated by psoriasis. Here is a new idea which is worth putting to practical tests.

Dr. Percy Lewis.

Dr. Percy Lewis, of Folkestone, who writes this week on the "Treatment of Nervous Disorders," is the son of the late Dr. Henry Lewis, also of Folkestone, who was the first President of the Balneological Society, which was founded just upon twenty years ago. Dr. Percy Lewis, who has himself been a President of the Society, is a "King's" man, and has been one the leading practitioners in Folkestone for several years. He has himself been President, and is one of the most loyal supporters of the Society (now a Section of the Royal Society of Medicine) which his father did so much to establish. Since the outbreak of war, Dr. Lewis has given a great deal of time to the care of the wounded. In conjunction with Dr. Wainwright he inaugurated and equipped a new

hospital at Folkestone, which is entirely given over to the military.

Dr. Withers Green.

Dr. Withers Green, the author of the article on "Talking," is an old "Guy's" man, whose time is largely given over to assurance work. He lives in Wardrobe Court, one of the quaint and picturesque backwaters close to St. Paul's Churchyard. It is said of the late Sir Lawrence Gomme that he knew more about old London than anyone had ever known. If he knew more about certain parts of it than Dr. Withers Green he must have known a great deal. The latter can sometimes be persuaded to take his friends round his favourite haunts. On those occasions, with the aid of a megaphone, he lovingly dilates upon the points of historical interest which abound in the neighbourhood of the Temple and the Inns of Court, every corner of which he knows, as the French say, like his pocket. Sinapis.

CURRENT TOPICS.

Anti-Germanism and the Medical Profession.

As a medical journal we have, of course, no concern with political questions, whether domestic or foreign, and we have no wish to criticise the so-called anti-German movement as regards its political or economic issues. It has, however, certain relations to scientific progress which touch us closely, and which make it necessary for us to make a few comments. As we understand it, the essence of the anti-German movement, as it is organised in the Anti-German League is to perpetuate for times of peace the national hatred which is natural and perhaps useful in time of war. When the war of Dreadnoughts and machine guns is over, we are, say these propagandists, to maintain an economic and social state of war against our present foes. Not only is Germany always to be the foe, but individual Germans are always to be our personal foes. We do not know whether this would be good economics or not, but we are in no manner of doubt that such a mental attitude would be highly detrimental to the development of science. Science knows no international limits. We cannot shut out from thought and consideration the work of a thoroughly scientific and efficient people, whatever reason we may have to disapprove of many of their activities. It is petty to make use of present emotions to belittle the contribution of Germany to scientific progress in the past, and it would be very short-sighted to attempt to prevent such contribution in the future. Let us by all means see that the danger of Germany politically should cease to exist, but let us also, if we can, make sure that the useful activities may be as far as possible unhampered. Medical men are well aware of the services to humanity rendered by German men of science in the past. They are also aware of the high place in the chemical industries and in the manufacture of scientific apparatus which German energy has won, and more than most other classes they feel the deprivations which necessarily are brought about in war-time. They do not wish such deprivations to be permanent. In view of these considerations we do not wonder that some surprise should have been caused by the fact that the hospitality of the Royal College of Surgeons in Ireland should have been given for the purpose of inaugurating a branch of the Anti-German League in Ireland. The Medical profession, as such, should not be identified with the movement, though, of course, we have no desire to limit the political activities of individual medical men.

National Nerves.

We have, on one or two occasions, since the outbreak of the war, commented on signs of "nerves" which threatened to interfere with the cool judgment so necessary in a time of national danger. These signs have been more or less intermittent, and have not, we think, been evidence of any deep-seated disease. The recent Zeppelin raid on the Midlands has, however, caused some recrudescence of symptoms of nervousness which should not be fostered. It is with some interest we note that the *Spectator*, in its last issue, deals with the matter from much the same standpoint as ourselves. In an article entitled "The Neurasthenic Press," it shows the inherent morbidity of the conduct of certain newspapers. Quoting from some medical work in its description of neurasthenia, the *Spectator* finds the description "positively uncanny in its application." We cannot do better than quote the paragraph:—"In the first place, we are told that the symptoms of neurasthenia are as follows: (1) A general feeling of malaise 'combined with a mixed state of excitement and depression'; (2) Vertigo and 'a transitory clouding of consciousness"; (3) 'Weakness of memory, especially for recent events'; (4) 'Morbid heatings, flushings and sweats.' Next, we are told that neurasthenia shows many strange and peculiar symptoms, such, for example, as *Batophobia*—fright of things falling.' Further, there are to be observed 'mental ruminations,' in which there is a continuous flow of connected ideas from which there is no breaking away. Sometimes, too, there is '*Arithmomania*'—an imperative impulse to count (*cf.* the persistent effort of the group of newspapers in question to add up the German losses). Again, neurasthenic cases 'often exhibit a marked emotionalism and readily manifest joy or sorrow; they may be cynical, pessimistic, introspective, and self-centred, only able to talk about themselves or matters of personal interest, yet they frequently possess great intellectual ability.'" We entirely agree with our contemporary.

War and Eugenics.

At a meeting of the Royal Statistical Society held on Tuesday, February 15th, Major Leonard Darwin read a Paper—"On the Statistical Enquiries needed after the War in connection with Eugenics." Major Darwin began by pointing out that, though it was difficult to estimate the casualties in this war, ours might now be in number as high as 6½ per cent., and the German's possibly

between 20 and 30 per cent., of the number of the fighting men available. Though all must devote all their main energies to winning the war, yet some thought might even now be given to the enquiries which might profitably be instituted, when peace gave more leisure, concerning this racial damage. Though the best estimate should then be made of the total loss of progeny because of the war, this would tell nothing as to racial effects, which would depend on whether those killed were above or below the average inborn qualities. The Napoleonic wars were said to have diminished the stature of the French nation; but whether this would be the case with us would not be ascertainable for many years. Even if it would be impossible actually to measure the racial damage done by the war, enquiry as to its probable effects should be made. The classes sifted out before the fighting force entered the fighting line consisted of the shirkers, the rejected on enlistment, the men turned out of the service or kept at home because of incapacity, and those invalided from abroad. True, many were kept at home because of good qualities. Again, courage exposed men to great danger in war, whilst disease tended to pick out the weakest. Balancing these conflicting considerations, the conclusion arrived at was that war unquestionably killed off the better types and was therefore highly dysgenic. The anticipation of racial damage was strengthened by considering the death-rate amongst officers, who formed a still more highly selected class of the community. Much was already known as to the laws of heredity, and on these laws investigations as to the probable future racial damage to the nation could be based. The active causes of the damage would not however, cease with the war; because the birth-rate of the higher types would continue to be adversely affected. As to mitigating these racial evils, those born in the last eighteen years would form an entirely undamaged section of the community, and it would be increasingly necessary for the next twenty years to inculcate a belief that where both parents are fairly healthy it was immoral and unpatriotic to limit the size of the family, except in view of bringing up the children in comfort, though not necessarily in luxury, and of there being fairly wide intervals between births. It followed also that the racial damage would be at its worst when peace was declared, and the checking of the multiplication of the unfit would never be more needed than then. He looked at all these matters, however, as part of the whole great question of racial advance or decline on which the fate of nations so largely depended: and he was actuated by the fear that in the excitement of party strife, all eugenic reform would be pushed on one side to make room for topics of more immediate interest, in which case there would be grave danger of our country slowly drifting down the hill of racial degradation and of never again occupying its past high position in the councils of the world.

Examinations.

Conclusions from insufficient premises are to be deplored in all mental processes, but above all in the case of examination candidates. The proposition is very generally allowed, we are aware, yet even to-day there exist medical examiners who wax impatient if a conclusion be not speedily arrived at; and evidence of such impatience reacts most unfavourably upon the candidate, causing his answers to become indefinite and hesitating. An examiner in morbid histology, for example, who strictly adheres to a three minutes' time limit for each microscopical preparation, and who presses early for a positive statement as regards the nature of the lesion in question, does the undergraduate scant justice, and returns a result list which is no index to the individual merits concerned. If he but take the time to allow the candidate to isolate and identify the elements of the section, aiding him by a few judicious questions, and stimulating the synthetic powers, he may come to be surprised at the result. Persistence in the opposite methods aggravates the disastrous practice of *spotting*, which cannot be too strongly condemned. Moreover, in the case of final qualifying examinations in clinics, credit should be given rather to extent and accuracy of observation, than to rapidity of deduction. It remains a matter of surprise to many of us that in the space, say, of one hour, as much is expected of an unqualified student as it is allowed to a man of many years' practice to postpone for days, and perhaps indefinitely. The abuse described is not universal, but is present, and fails in discrimination and intelligence.

Tales of a Scotch Professor.

A well-known Scotch professor, vigorous in body and mind, with a syncopated style of speech, tells the tale:—"We were—travelling—to—London. At the Central—Station—an intoxicated person—had got in—and his—language was painful—and frequent and free There were—ladies—present. He—was—profane—and—worse. We—thought—how—to—keep—him—quiet. So—we—dislocated—his—lower jaw—at—Beattock. Ah—but—we reduced it—before we reached—Euston."

The same professor was consulted by an elderly man who had a tuberculous testicle; he advised the patient to have it removed. "Removed? Cut off? No, no," said the patient, "I'll get more skill before that." "Ah—but—where will—you get it?" asked the professor. "In London, of course." They parted.

Some weeks after the patient returned to him for another consultation. "Ah—and so you—left here—for more—skill? How—did—you—get on?" "Oh, I went to Sir X—— Y——, in London." "And what—did—he—say?" "Oh! he told me to paint the part with iodine!" "Ah! I quite—agree—with—him—but—have it removed—first!"

Please visualise the old gentleman doing sepia work on the detached organ!!!

Do you remember the old Professor in whose class were more than the usual number of MacDonalds? One of them was, at the end of the lecture hour, protesting that his name had not been called. "What is your name?" "MacDonald." "Oh! of course it's MacDonald, but which one are you?" "E. F. MacDonald." The old man looked up the roll-book, and after examining it said: "It's all right, sir, it's all right; you are marked 'present.'" And then in a dreamy, introspective way, "There's so many of you dashed Macdonalds about, I don't believe there ever was any Massacre of Glencoe."

Carbolic Acid in Tetanus.

At the meeting of the Medical Society, Dr. Lesage, of the 6th Army, described a method of treatment used by Dr. De Montille in tetanus, giving

good results, even in very acute cases. His method is Bacelli's, modified as follows :—

Carbolic acid, 1 gramme.
Ether, Q.S. to dissolve.
Sterilised olive oil, 10 grammes.

In this formula the carbolic acid is less irritant and less toxic, a smaller dose being efficacious and a smaller number of injections (intramuscular) being required; not more than one or two per day were used by the author. 1.50 gramme of carbolic acid may be injected each day without inconvenience, although one-sixth of that quantity has been found sufficient to give the desired effects. The following points are to be noted in connection with this method :

1. The patient is *very rapidly* calmed; he is, so to speak, de-tetanised.
2. The great simplicity of the method; one or two intramuscular injections per day being sufficient.
3. The very manifest effect of even quite a small dose, the author using 20 centigrammes of carbolic acid per 24 hours—*i.e.*, 2 c.c. of the mixture (maximum dose "pro die"), and reducing the daily dose to $1\frac{1}{2}$ or $1\frac{1}{3}$ c.c. in a few days' time.
4. Real and *durable* recovery being obtained 10 or 12 days after beginning the treatment in serious cases.

Bradycardia in Soldiers.

Dr. Gouget has noted the frequency of bradycardia in soldiers, wounded or sick, coming directly from the front. Out of the 133 of these men, without any fever, one third presented a pulse rate of between 58 and 38. Other men had relative bradycardia in the course of febrile affections, usually accompanied with a rapid pulse. There was generally at the same time slight irregularity of the pulse and lowered blood tension. In the majority of cases these phenomena disappeared in a few days or two or three weeks. Occurring in the course of various affections, they seem to be quite independent of the nature of the latter, and are due to over-fatigue.

Army Malingering.

In France, where conscription obtains, many and various are the ways employed by a certain category of men to get out of military service, or if incorporated, to obtain their discharge or "réforme" as it is called here. The men of the Army Medical Service, however, are very wide awake, and sooner or later all the "little dodges" are discovered. Dr. Lombard has described a method by which shamming unilateral deafness may be exposed. In a bona-fide case of unilateral deafness, if the patient be made to read out loud, and one suppresses the hearing alternately on each side, when the sound side is suppressed the patient immediately raises his voice very markedly because he cannot any longer hear himself speak, the voice falling to its former intensity as soon as the hearing is restored.

Obviously when a man has natural hearing on both sides he does not raise his voice when one side is suppressed, for he continues to hear with the other. Dr. Poyet has used this method with success, and the means he employed to suppress hearing consisted in a jet of tepid water directed into the external auditory meatus; the gurgling thus produced gives the desired effect.

One of the latest tricks has been described at the "Société de Chirurgie" by Dr. Laval. It consists in the production of gangrenous abscesses by means of subcutaneous injections of petroleum. This method has been extensively used of late, and Dr. Laval has studied the whole procedure. An ordinary hypodermic syringe is used, and the injections are usually made in the lower limb on the inside of the knee; also in the upper limb, arm, forearm or hand.

Cellulitis is produced and the skin presents blisters with pus. Fluctuation appears towards the fourth day, and when the collection is increased a certain amount of pus issues, and one usually finds that trabeculae divide the cavity into compartments. The characteristic point, however, is that as soon as the cavity is opened a smell of petroleum is noticed. In some cases the odour was absent, but by rubbing a compress in the cavity the odour was at once detected. Suppuration continues for a long time, and sometimes there is necrosis of muscles and tendons: in one case Dr. Laval had to amputate. Secondary infection may take place with septicaemia.

Traumatic Deafness.

DEAFNESS, unilateral or bilateral, partial or complete, has been rather frequent during the course of the war amongst soldiers, the causes being either some cranial traumatism or indirect concussion due to explosions of shells. At a recent meeting of the Academy of Medicine, Drs. Lannois and Chavaune gave their conclusions from the prognosis point of view on the subject, based upon the study of over 1,000 cases. The prognosis depends on the following points:—

1. The previous condition of the auditory apparatus. Individuals who had been suffering from chronic middle-ear trouble, suppuration or sclerosis, furnished, after labyrinthine concussion due to the explosion of shells, a much larger proportion of cases of deafness or diminished hearing than normal individuals.
2. The existence or not of direct cranial traumatism. Deafness was habitual in traumatic mastoiditis; frequent in traumatism in the neighbourhood of the ear; rare in fractures of the vault.

In these latter cases deafness was usually unilateral. In the absence of direct traumatism, labyrinthine concussion rarely gave rise to deafness; in 615 cases of labyrinthine concussion with or without rupture of the tympanum, there were only 2 per cent. cases of definite bilateral deafness.

PERSONAL.

PRINCE ALEXANDER OF TECK has become chairman of a committee formed to promote the election of Professor William R. Smith, M.D., as one of the Sheriffs of the city at the next election.

DR. J. S. CRONE, J.P., of Kensal Lodge, Willesden, has been appointed deputy coroner for West Middlesex, in succession to Mr. R. Kemp, who was recently appointed coroner.

MAJOR H. E. STANGER-LEATHES, I.M.S., has been appointed to act as Personal Assistant to the Surgeon-General with the Government of Bombay, in addition to his military duties.

SIR JOHN ROSE BRADFORD, K.C.M.G., C.B., M.D., F.R.C.P., Colonel, A.M.S., has been elected President of the London and Counties Medical Protection Society, Limited, in place of the late Dr. George Allan Heron.

MAJOR PRIESTLEY and CAPTAIN VIDAL, of the R.A.M.C., have returned to England from Germany. These are the two officers mentioned by Lord Robert Cecil in the House of Commons as having been detained by the Germans for more than half a year in violation of the Geneva Convention.

ORIGINAL PAPERS.

TREATMENT OF NERVOUS DISORDERS.

By PERCY LEWIS, M.D.,

Honorary Physician to the "Nursing Homes" Military Hospitals, Folkestone.

Regular attendance for some months at one of the large hospitals for nervous diseases has induced in the writer certain reflections which it is here endeavoured to put forth.

Treatment in such institutions seems to be devoted far more to diagnosis than to cure. What is meant is that the painstaking attention to the minutest detail, and the accuracy of inductive reasoning which is exhibited in the making of a diagnosis, is by no means so much in evidence when the question of treatment is under consideration. A house physician at one of these hospitals, when asked what he thought of the treatment, summed his opinion up thus: "Everything is syphilitic; and, if it is not, you cannot do anything." This was, of course, an overstatement of what obtains, but there is a modicum of truth in his dictum.

For purposes of discussion, nervous diseases may be divided into three classes—viz., those in which there is a structural change, functional cases where there is no obvious structural change, and mixed cases.

In the first class, the most interesting are those which are characterised by sclerosis. The routine treatment consists of rest in bed, massage, electricity, salvarsan and mercury, often even if the Wassermann reaction be negative, and so on.

In considering whether these usual methods, whose success is mostly temporary, constitute all that can be done, it behoves us to review similar morbid processes in other organs with the treatment in those cases adopted. Further, we have to note the results of those treatments, and to see whether, having regard to the greater vulnerability of the nervous system, the application of similar methods to it would be likely to be followed by better results than are at present obtainable.

Analogy from the causes of sclerotic changes in other organs would point to similar changes in the nervous system having also a toxæmic or micro-organismal origin. A large number of nervous disorders are already acknowledged to have such a source. To mention some—neuritis, anterior poliomyelitis, myelitis, cerebro-spinal meningitis, chorea, Landry's paralysis, subacute combined degeneration of the cord, cerebral and spinal syphilis, general paralysis, and locomotor ataxy. For convincing proof of the bacterial genesis of brain and cord affections, reference should be made to the work of Drs. Orr and Rows, published in 1914 in the "Proceedings of the Royal Society of Medicine," and also in *Brain*. In these papers the investigators not only proved the fact, but they also showed the paths of infection of the nervous system from such diverse septic foci as carcinoma of the tongue, erysipelas of the face, bed sores, psoas abscess, and cystitis. They further formulated the laws which govern such infections—as, for instance, that "the locality of the lesion in the spinal cord always corresponds with the nerve supply of the infected focus."

That very great improvement can be obtained when the cause is syphilitic by rigorous anti-syphilitic remedies suggests that anti-toxic principles applied in cases due to other causative organisms would be likely to be followed by similar good results.

We know that from the earliest moments of our existence to its termination we are continually subjected to the attacks of micro-organisms, and that our health and life depend on a successful defence. As long as our defensive arrangements are effective we are free from the assaults of the enemy. But at various times, and for various reasons, our defence breaks down, and one or more of the allied forces obtain a local foothold, or a general occupation. Those who study the diseases treated at baths and spas know how common it is to find there local footholds, or septic foci, existing all unsuspected by their hosts, who go for treatment for quite different reasons. One need only instance arthritis. In this disease it is a very common experience to cure the complaint solely by treatment directed to the local septic focus. Such foci may be found in the mouth, in the posterior nasal space, in the maxillary sinuses, in a bronchial catarrh, in the ear, in the big bowel, in the gall ducts, in the kidneys—and, in fact, almost everywhere.

Now if such comparatively coarse structures as joints should thus be affected and destroyed by low-grade septic organisms, it is obvous that it is more than likely that the more delicate nervous centres would also be liable to be a prey to similar attacks. With the evidence which we have of the effects produced by the spirochæte, the proposition has surely only to be suggested to be at once accepted. Therefore it is contended that in all cases of nervous disease, the preliminary to all treatments should be a thorough search for, and cure of, all septic foci.

This search is not at all unnecessary even if the syphilitic origin of the complaint be admitted. It is gradually coming to be recognised that the symptoms known as syphilitic may now be divided into two classes, viz., syphilis, *pur et simple*, and syphilis plus sepsis. It is, therefore, just as important to detect the septic foci in this disease as in any other. Consider how much improvement is effected in many syphilitic conditions of the nervous system, and consider also how much more might possibly be accomplished if the other causes of infection were at the same time removed. Syphilis, in fact, predisposes to other septic infections, just as any other invading organism does. It follows, then, that chronic sepsis of any kind is apt to be a mixed one, and the failure of treatment directed against any one, may be due to others being undetected and unattacked. So that the perfect cure of oral sepsis, discovered in a sufferer from disseminated sclerosis, if it be not followed by amelioration of the symptoms, does not necessarily prove that the principle of that treatment was wrong, but only that it was not the source or not the whole source of the disease in question.

In books on nervous diseases, the cause of sclerotic conditions is given in a very indefinite

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manner as due to possible congenital conditions, or as following fevers, injury, etc. They mention in the same indefinite manner the possibility of a toxin, but when they come to treatment the same round of rest, massage, electricity, etc., is given. This is just the same course which used to be prescribed for arthritis at the Spas, before the Spa physician recognised the *rôle* of sepsis in its causation. It was long before this view gained general acceptance, and no doubt it will be long before similar acceptance is granted to the idea of the septic cause of sclerotic nervous conditions. But as President Wilson has said, "principles are eternal," and that which causes sclerotic changes in kidneys, liver and lungs, must also be the cause of sclerotic conditions in the nervous system.

It should be mentioned that just as the use of rest, massage and electricity in nerve complaints is followed by temporary improvement, the same temporary result is obtained in arthritis. Since the use in addition of treatment, directed against the toxic elements of the disease, has become more common, far better results and many more cures are obtained. These cases are constantly being reported in current medical literature.

In fact the more one considers the matter the more one discovers how the condition of sepsis pervades the whole field of medicine. The late Mr. Labouchere was fond of saying that "medicine was mostly a matter of aperients." In so far as that the intestinal tract is a large source of sepsis, this opinion is correct. Examples crowd into one's mind of common experience corroborating this view. The well-being experienced after a suitable aperient is simply a case of increased efficiency from the removal of toxins. A doctor who suffered from attacks of cardiac irregularity, often lasting for months, consulted various specialists without experiencing relief. On one occasion when the condition had existed for four months, a general practitioner told him that he only required an intestinal disinfectant in the shape of a dose or two of calomel. This cured him at once, and he now informs me that a grain of calomel will always remove the symptoms in a few hours. He can obtain similar results, though not so quickly, by abstaining from food, drinking large quantities of water, and taking walking exercise. In either case his cure is conducted on sound bacteriological principles.

In cases of epilepsy, the routine continuous administrations of bromides to control the attacks is merely an instance of treating a symptom without attacking the cause. The writer is entirely convinced that far better results free from injurious effects are to be obtained by other means. Just as the doctor's heart above-mentioned is peculiarly susceptible to toxins manufactured in his alimentary canal, so are the nerve centres in epileptics peculiarly susceptible to similar intestinal bacterial results. The treatment then consists not so much in controlling the symptoms as in attacking the source. Strict intestinal antisepsis by diet and drugs, and regulation of the general health by fresh air, exercise and suitable diet so as to conduce to the normal and efficient action of the whole body, is not only theoretically right, but practically is now in many quarters admitted to give the best results. It may be objected that if the attacks of epilepsy are due to intestinal toxins, how is it that a regularly acting cause produces an intermittent result? Why, for instance, does an epileptic seizure end, and how do you on that theory explain *petit mal?* The answer would be, that just as the doctor in the heart case can cure the uncomfortable action of his cardiac irregularity by exercise, so does nature in a fit work off the excess of toxins by the violent muscular work performed in an epileptic seizure. The recovery from *petit mal* represents nothing more than the ebb and flow of the battle between the opposing forces of the bacterial toxins on the one hand, and the defensive forces of the body on the other. If one watches the procession of epileptic patients at an out-patient department for these cases, one is struck with the aspect of chronic toxæmia which characterises them all from the youngest upwards. The conditions of epilepsy and convulsions in children have much in common. In the latter the toxic conditions have long been admitted. Whoever thinks of treating them by bromide alone if at all? Calomel or other antiseptic aperient is always the sheet anchor of treatment, followed by strict dietetic instructions. How seldom are such methods adopted in at any rate the out-patient department treatment of epilepsy? To what is the success of epileptic colonies due, if not to the effect which a life directed to general conditions of health has on the intestinal functions? It is unfortunate that the colonies are only used for those advanced cases where the "habit of epilepsy" has become confirmed, a point to which we will return later on.

In most nervous diseases a septic element can be found, and indeed the number of such conditions being admitted to the category is constantly being increased. Neurasthenia has at last been admitted, grudgingly by some, in a wholehearted manner by others. The result of partial or complete admission by the physician in charge is represented by the treatment which he adopts. Who believing entirely in the toxic cause treats the condition by electricity as their main weapon of attack? If one were formulating principles for treatment of nerve diseases, the first would be "Search for a septic element," and it would be to this element that treatment would be primarily directed. Not of course solely, for few cases are as simple as that. Most cases are instances of vicious circles, and other points in the circumference demand attention if the war is not to be too prolonged.

The symptom of *petit mal* and the ebb and flow of the battle, has its counterpart in many other nervous conditions. Many such notoriously exhibit stages of progression and periods of comparative calm. This again is only to be expected, and is to be explained by an increase or diminution in, or absorption of, toxic material. Especially would one expect this in the case of intestinal sources, where the conditions fluctuate more than in most other foci. In disseminated sclerosis, such periods of increase with remissions and improvement are quite the rule, and there is accumulating evidence of the septic origin of this complaint. The writer has under his care a case which commenced after an attack of colitis contracted in Egypt. Even after two years, a vaccine made from the fæces brought about such an improvement that the patient, who previously was quite unable to move a step, could in a few weeks with one hand on a bath chair manage to walk a mile. Other cases may be found in the medical journals of recent years. For instance, Dr. Bolton, of Nottingham, records a case of disseminated sclerosis where the well-established symptoms, which had existed for six years, were almost entirely removed by antiseptic measures applied to the septic focus, in this case a chronic atrophic rhinitis. He says that "under the antiseptic nasal treatment her walking powers improved, and she gained control over the sphincters. Three years later the nose still receives attention, but nothing is done for the spine. The sphincters give no trouble, walking is still improving, and she is able to perform all her

ordinary duties without difficulty. Apparently the cause has been found and kept under control and the disease checked." In another case of disseminated sclerosis recorded by Dr. Lyon Smith, treated by a vaccine made from the cerebrospinal fluid, the improvement is mentioned as most striking. In the *Lancet* of September 5th, 1914, Mr. White Robertson in discussing the paths of infection in streptococcal fibrositis from oral sepsis, says that Morse-key paralysis, telegraphist's, writer's and typewriter's cramps, are all instances of streptococcal fibrositis. He insists that the toxæmia has got in its work, as it always does, at the point of overstrain or injury or prolonged fatigue.

If one admits that in the cases so far mentioned there is a septic element, one is tempted to inquire whether this principle obtains in the realm of psychiatry. From an attack of the "blues" cured with a simple dose of calomel, one is led to view melancholia as an exaggerated "blue," but requiring more detailed anti-toxic or anti-bacterial remedies. No one treats insanity without consistent removal of intestinal bacterial products—in other words, without great attention to the daily evacuations. Like the epileptics, most cases of mental disorder present evidences of aspect, colour, odour, perverted secretions, etc., showing the presence of a toxæmic condition. The improvement of the mental condition moves *pari passu* with the improvement in all these matters. So convinced is Mr. White Robertson of this, that in the article above quoted he gives his opinion that all cases in mental hospitals should be thoroughly examined by X-rays and bismuth meals. The road to success in many of these conditions lies in a liberal dietary, which not only enables the weakened and poisoned nervous system to be renovated, but, stimulating nutrition generally, aids in removing toxins from the tissues—and, what is even more important, it prevents intestinal stasis by leaving a large residue which promotes efficient evacuations.

Many cases are known to the writer of melancholia with delusions which have been cured by a course of vaccines after other methods had failed. Two ladies who had had prolonged courses at Harrogate, amongst other therapeutic measures, were cured by the removal of their pyorrhœas by vaccines combined with local surgical measures. A case now under treatment has complete relief for nearly a fortnight after each inoculation, and the interval of relief is gradually lengthening. It is not for a moment contended that for such cases as these spa treatment is unsuitable. On the contrary, as the writer pointed out in his Presidential address in 1912 at the Balneological Section of the R.S.M., spa treatments are eminently useful in all septic conditions when administered in conformance with the principles of bacteriology. In the above cases the failure of the spa treatment was due to the measures being solely directed to the removal of toxins without efficiently removing the source of the supply in these cases of pyorrhœa. With cases of mania, it may be inquired why they often get well, and also why they often relapse. Text-books on mental diseases note the fact, but ignore the reason. Surely the explanation is the same? A patient recovers if—and only if—he can, with or without assistance, deal with the toxic cause, in just the same way as one recovers or not from an infectious fever. If that be so, how much more likely is recovery to take place should treatment be adopted in conformity with this principle?

The success of treatment by hypnotism and suggestion is in part due to the ease with which it cures constipation. All those who practise psychotherapy know that this part of the treatment can, at any rate, be secured with reasonable certainty, and that it will be followed at once by such improvement in the general condition, that confidence in the method on the part of the patient and his friends will be early assured. So that here again by attacking a source of poisoning, benefit is gained. It is not often, however, though as in the two cases of mental depression alluded to, it was so, that the septic element constitutes the whole cause of the complaint. One may add another principle to the rules which should guide us in managing nervous disorders, *viz.*, "That in every case of nervous disease there may be a mental element," and that, "A diseased condition, if sustained long enough, produces a habit which is apt to remain long after the cause is removed." The habit is psychical, and the flaw is central, not necessarily peripheral. Many examples might be given. For instance, a man has a painful disease or injury of his leg. The limb is removed by amputation. But if the pain has lasted long enough, he does not lose his pain, but still feels it in the amputated part. Surgeons, in trying to cure this condition by further operations on the scar, know how unsatisfactory such operations are apt to be. Really such success as attends their efforts is due to suggestion, *i.e.*, to the strong expectation of relief on the part of the patient. Any practitioner of psycho-therapy knows he can obtain better results by suggestive methods. How otherwise explain the immediate cure of lameness with instant discarding of crutches, which attends the forcible movements of diseased joints to the sound of a brass band by travelling quacks? The explanation is that first a joint becomes painful. The patient finds that by fixing the joint by muscular action, the pain is relieved or removed. At first the least relaxation induces discomfort. This is experienced often enough to induce a mental habit, soon transferred from the conscious to the sub-conscious mind, by which the joint is kept fixed without the intervention of the conscious attention. The joint under this rest treatment becomes cured, but the fixation being now in the hands of the sub-conscious mind, remains. Suggestion is the means of dealing with the sub-conscious mind. All the paraphernalia of brass band, forcible movement, the pile of discarded crutches, the insistent assurance of relief, are but means of exciting the expectant attention necessary for cure. Cures of similar cases are effected in a less theatrical manner by medical practitioners every day, notably at the spas. There the balneo-therapeutic measures carried out create the mental atmosphere required to produce the necessary change in the sub-conscious mind. The frequency with which various neuralgias, headaches, tics, and other pains are removed by psycho-therapeutic means alone, proves that they were existing after the cause had gone.

Another principle should be mentioned—viz., that in organic diseases of the nervous system the functional disturbance generally extends further than the direct influence of the organic lesion justifies. For instance, "in cases of apoplexy, the lesion acts on adjacent parts like shock, setting up functional disturbance." (Bernheim.) It is well known how a hemiplegic's powers may be improved months after the attack by exercises, and by methods of encouragement which in essence act on the principle of suggestion. We cannot make destroyed nerve elements anew, but we can call up activity in those which were only functionally out of gear. In fact we can remove the habit remaining after the cause has disappeared. Charcot was alluding to the same condition when he said that hysteria and disseminated sclerosis often existed together,

because he found that he could remove by suggestion many of the symptoms of this disease. The removable symptoms he considered as due to hysteria, though it is obvious that a "habit" acquired in a progressive period of the disease, reinforced as time goes on by auto-suggestion, constitutes the right explanation. Nicoll, in urging the use of hypnotism and suggestion in the treatment of organic nervous complaints, draws attention to the same point, using paralysis agitans as an example. He points out that patients suffering from this disease are unable to walk properly, or fall when they attempt to get about. One fall suffices to make the patient even more insecure and causes a want of confidence which soon becomes a habit, still further diminishing his powers of locomotion. The writer has observed the same thing in cases of locomotor ataxy. In one case a patient, well able to walk about, gave up after a fall all attempts to use his legs for ambulatory purposes. There are, then, sound reasons for using suggestion in organic nervous complaints. But there is more to be gained by this method of treatment than simple removal of the unnecessary mental concomitants of the disease. In many organic diseases the path of impulses from the centre to the periphery may be interrupted, but there are often alternative routes which are capable of adoption if only the necessary means be used. Suggestion offers a powerful but harmless means of doing this. Frankel's method of treating ataxia is an attempt to restore the voluntary co-ordination of certain movements by making special uses of the sense of sight. There is no question here of doing away with morbid anatomical changes in the spinal cord, but only of finding an alternative means. Lloyd Tuckey has observed the severe pains in a case of tabes dorsalis disappear under treatment by hypnotic suggestion, and the common experience of the relief of the pain of cancer by such means are all illustrations of the underlying principles, and urgently call for its more extended use in cases of organic disease.

What is here maintained is well illustrated in the case of epileptic attacks. Dr. Campbell Thomson, in his recent book on "Diseases of the Nervous System," says many patients find out for themselves that they can frequently ward off an attack by force of will, and that this power should be encouraged. He suggests that the moment a fit threatens, the patient should clench his teeth and grasp something tightly, preferably his own arm. He says that in many instances the discharge can in this way be avoided. Here is a good illustration of treatment by increasing the strength of the conscious mind, and also an illustration of an appeal to the sub-conscious. In no case would such treatment be successful in warding off a convulsion from a poisonous dose of strychnine administered for the first time. In epilepsy the centres have so frequently been stimulated by intestinal poisons that the mind learns the initial symptoms, and though the dose may not be able to cause an explosion when the conscious mind is strongly opposed, these symptoms cause an expectant attitude in the sub-conscious mind, which fires the mine. If this expectant attitude of the sub-conscious mind can be done away with or lessened by the means Dr. Thomson advises, the fit does not occur. How much more likely, then, is this line of treatment to be useful in epilepsy if the antitoxic treatment be combined with a systematic form of appeal to the sub-conscious mind in the method known as suggestion. In fact, this treatment is so well known to be of use that discussions have arisen as to how suggestion acts in these cases, and as to how best to use it. Some have thought that the benefit arises only from the renovation of the nerve centres in the restful sleeps given by hypnosis. We hope enough has now been said to show that more than this is accomplished. In any case, the fact of its usefulness is undoubted.

Next to the cure of constipation, suggestion probably finds its most frequent opportunities in the cure of insomnia. In this complaint again, the habit is apt to remain long after the cause has gone. These are the cases *par excellence* for the psycho-therapeutist. Every such practitioner knows that these conditions are among the easiest with which he has to deal, and that in well-established cases suggestion offers possibilities which are not within the range of any drug treatment. There are many ways in which suggestion may be used for the cure of insomnia without the induction of hypnotic sleep. The writer's routine treatment is to explain to the patient the mechanism of normal sleep, to show how the habit has been broken, and to teach the patient how the habit of sleep may be recovered. This has been summed up for the patient in the following verse, which the patient has to mentally repeat while carrying out the plan :—

"First I must get quite comfy,
Limbs all relaxed and free;
Breathing so calmly, deeply,
Sleep's stealing over me.
Drowsy—so drowsy—drifting
Down into slumber deep,
I feel I am really going—
Going—going—to sleep."

By this method not only is the patient's attention kept from wandering, but a strong auto-suggestion is added. It very rarely fails.

The writer's intention is not here to teach the practice of suggestion, but only to make out a plea for its more systematic use. When attending the discussions which have been taking place recently in London on the nervous conditions produced by the war, one could not but be struck with the almost universal want of knowledge of the practice of suggestion exhibited by the members at the meetings, more especially on the part of those who were most averse to this treatment. This, however, is not to be wondered at when one reflects that England is almost the only country in Europe which has no school for the treatment of hypnotism and suggestion, and no hospital systematically devoted to its use and instruction. Even the physicians who specialise in psycho-therapy seem to have educated their natural gifts in a haphazard manner, and from their remarks it is obvious that their acquaintance with the ordinary text-books is very limited. Here when, owing to the war, there are such numbers of persons requiring this special form of therapeutics (which is supplied by all other combatant nations to their armies) there is an urgent need for the establishment of such an institution.

In conclusion, then, the object of this paper will be attained, firstly, if it be successful in directing more general attention to the septic element present in so many diseased nervous conditions, and especially in obtaining recognition of the work of Drs. Orr and Rows in this connection; secondly, in securing assent to the existence of certain principles which govern the mental side of nerve disorders; and, thirdly, if it helps in the establishment in this country of a school for the study and teaching of psycho-therapeutics, and notably of that branch known under the terms of hypnotism and suggestion.

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ON TALKING.

By A. WITHERS GREEN.

Talking is a lost art! Our hurried life, our commercial view of life, have helped to make it so. The greed of the dollar may add to the quantity and rapidity of talk, but debases its quality, making of it almost a machine product. Since we must be ever using speech, can we not deliver it from base uses and enthrone it, as it is, a gift to humanity?

We had better begin in private and humble spheres, domestic elegance in speech, as well as in furniture and economy. We are told that the tongue is an unruly member—the more then let us watch its doings, and direct its power into wise channels. Since talking is the commonest production of intelligent sounds, it should become the most perfected, not only in utility, but in charm. If the speaker has a musical ear, he will order his voice to please his ear, and his utterances will become musical too. There will be a harmonious compact between tongue and ear to judge and arrange the sounds produced.

Talking when stepping out into the publicity of the filled drawing room or public building assumes an altered form, viz., that of reading. Wouldst thou be a good reader? First learn to talk well. Many of the best speeches are talked out aloud in the study before they thrill the assembled crowd. Speechifying is akin to reading—you follow copied out statements, or you give forth aloud your own prepared thoughts. In both cases there is the element of preparation. Talking implies that you are unprepared. You don't know what the topic is to be. Hence it is that a well read, and observant, ear-open, eye-open, all-senses-open man has one element which makes for a good talker, and that factor is *knowledge*.

Among the many titles bestowed on the late Dr. Samuel Johnson, as you may read on the stone which bears his dwarf statue, at the east end of St. Clement Danes Churchyard in the Strand, is that of "talker," coming last, but not least, his biographer would declare. Now be it noted that Johnson was described by those who knew him as a panjandrum of literature, and also a library in himself. At the same time Garrick described him as the first man for sprightly conversation, which savoured most of the facts of human life.

To become a good talker one essential I have already mentioned is knowledge, and especially first-hand knowledge, and knowledge gained by experience; hence youth does not provide the best talkers, nor does loquacious old age, which, when disordered is apt to be mingled with knowledge. True it is that this lack of order is the bane of conversation—when one subject is talked upon but for five minutes, another comes clashing in, followed suddenly by a third topic. Alas! who can enjoy such confusion of diverse associations? A liberal education with a liberal use of it, issuing out in speech supplies a *command of words*—words right in themselves, words timely uttered, words choicely combined, freedom of speech, yet wholly controlled by the collegiate or self-educated mind.

Every theme, whether written or spoken, falls like lead unless upborne on the wings of imagination. That which nearly, but did not actualiy happen, let it be brought to the surface. Pregnant possibility is surely a probability, and would have occurred, but for some unforeseen circumstances.

Imagination is like the punkah in the East. The Sahib is oppressed—the heat is unbearable. Why? The punkah man has fallen asleep. The punkah no longer fans the air. Imagination! Arise and spread thine imagery throughout the atmosphere of my even inanimate surroundings, and I can talk myself and friend out of any vile temper.

Talking or in silence, let us be ourselves. It has been recorded of Thomas Carlyle and a friend that they sat together for a considerable time and then parted, neither having spoken on any theme at all, but they agreed nevertheless that they had had a fine time together. They were both great thinkers, and may have both been occupied with their own thoughts, and so really needed no social disturbances. This may be quoted as an exception, for one usually visits a friend either to say something to him or else to hear something from him.

If we talk of current events, more or less known to all, we should be at ease. If we light up thoughts on any common or private hobby, we then too should not lose our presence of mind. This last named is a most important element. Having this mental equilibrium we are ourselves, we are not self-conscious, we are free to sparkle mentally and catch flashes from others. What a delightful theme for intercourse is a hobby, be it books or golf, but the latter or any single one must not play the tyrant. Short sighted and fatally introspective is the man who has no hobby. What a pleasant way of filling up the gaps in one's knowledge! Suddenly you hear the very bit you wanted to know, whether mentioned inadvertently, or in reply to a question.

The power of speech can be a very potent weapon in the hand of the physician anxious to be of real service to the one who comes to him seeking alleviation from ill-health. We have heard of some advertised as very clever, who say little, look serious, act strangely, dogmatise precipitately, but this nature is unnatural and fills but a small space. No! Separated from the muteness or the limited scale of the brute creation, let us welcome with reverence, knowledge, and control the fair gift of speech, including that commonest use, the social chat. I have often noticed, especially at the after-dinner stage, that the time is occupied by tales of a questionable character—one is started, to be capped by another decidedly inferior in good taste, and perchance by a third so base, perhaps even insulting to the Deity. At such times I have wished myself out of the scene. A programme is useful, though inelastic, and refining is the presence of the fair sex as part of the company.

Our talking needs to be elevated, socially it often degrades us. The home life helps, and intermingled life also should have its high ideals and lofty aims. There is need of reform in order that we may talk to profitable and abiding pleasure.

So much is found in print that we let the printed page talk to us, but surely the silent letters look to us to wing them with life, and to sound out their excellencies along with our daily talk. The daily paper, the weekly gazette, and monthly journal, all should be the handmaids of our voice and speech.

Sir H. E. Roscoe, F.R.S., left estate valued at £44,871.

Mr. Walter Nicol, of Darlington, left £1,000 to the Hartlepool Hospital.

Major Walter Harry Nichols, J.P., of Cork, left £250 each to the Eye, Ear and Throat Hospital, Cork and the Southern Infirmary, Cork.

NOTES OF A CASE OF CHYLURIA.*

BY JAMES ALEXANDER LINDSAY, M.D., F.R.C.P.,

Professor of Medicine in the Queen's University of Belfast; President of the Section of Medicine of the Royal Academy of Medicine in Ireland.

CHYLURIA, dependent on the presence of the filaria bancrofti, is a common endemic disease in various parts of the world—China, Japan, Egypt, Zanzibar, Mauritius, some parts of Australia, Brazil, the Southern States of America, and Bermuda. The organism is a very thin nematode worm, three or four inches in length, and the female produces an immense number of embryos, about the ninetieth part of an inch in length, and the diameter of a red blood corpuscle in thickness. They enter the blood current by the lymphatics. They are almost or entirely absent in the daytime, but usually present in large numbers at night. In chyluria they are probably situated in the main branches of the thoracic duct, causing a stasis of the lymph in the lymphatics of the bladder or perhaps of the pelvis of the kidney.

All observers are, however, agreed that chyluria also occurs in a sporadic, non-parasitic form, that it is observed occasionally in the British Islands in persons who have never been abroad, and in whom infection of the filaria bancrofti can be definitely excluded. These cases are very rare. Herringham, whose account of the subject is the best that I have met, records that at St. Bartholomew's Hospital a case occurred in 1898, and no second case until the year 1910. No case has occurred in my time at the Royal Victoria Hospital, Belfast. The literature of the subject is singularly scanty. Text-books are very reticent on the subject, and some of them ignore it altogether. Very few *post mortem* records are available. It seems, therefore, desirable to put on record the notes of a case at present under my observation.

The patient is a clergyman, a man of tall stature and robust physique, weighing over 13 stones. He is a man of exceptional, almost morbid, energy. He ministers to two country churches, is fond of shooting and cycling, and often engages in manual labour both about his house and in the fields. He is, as the phrase is, "always on the go," and has difficulty in using up his exceptional stores of force.

He consulted me for the first time in April, 1913. He gave a history of excellent health until recent times. He had never been abroad. He had always been a strenuous worker, and had taken no holiday for six years. He was operated on in 1909 for congenital hernia. In August, 1910, he began to notice certain peculiar characters in his urine. It was milky in appearance. In the chamber it was sometimes dark brown, probably due to the presence of blood, but usually it was white as chalk. He noticed the curious fact that the dog or the cat would lap it up if permitted to do so. At first these appearances were only occasional, but after a time they occurred nearly every morning between 4 o'clock and 6 o'clock. During the day the urine usually appeared to be normal, but if he lay down in the afternoon, or partook of a hearty meal containing much fat, the milky characters recurred. He had the impression that fatigue, full meals, or mental worry precipitated or aggravated the attacks. He complained, also, of a tired feeling in the lumbar region, and of a desire to micturate rather frequently. On four or five occasions he had a stoppage of his urine, but after some hours of discomfort he passed with pain one or two stringy lumps, and then the urine flowed freely. He had noticed that if he did not go to bed until five or six hours after the last meal there was no unusual appearance in the urine during the night. He was accustomed to sleep on his back. His general health was unimpaired.

Examination of the patient was negative. He was a fine specimen of vigorous manhood, and all the organs seemed healthy. There was no abnormality to be detected in the genital organs.

The urine was milky in appearance and faintly acid in reaction. An examination at the Pathological Laboratory of the Queen's University revealed the presence of large quantities of chyle, but no other abnormality. No organisms were discovered.

My advice to the patient was to put some limit to his excessive activities; to exercise strict moderation in diet, especially as regards fatty foods, and to take precaution against lying on his back. A tonic was ordered.

The patient consulted me a second time on July 2nd, 1913, *i.e.*, after an interval of nearly three months. He reported improvement, the chyluria being now intermittent and the general condition good.

I did not see him again until January 13th, 1916, when he came to introduce another patient to me. He reported himself as nearly well, the chyluria being now only occasional, and occurring only in consequence of some exciting cause. Much fatigue or a heavy evening meal will sometimes cause a recurrence of his symptoms. He has adopted a mechanical contrivance to prevent him from sleeping on his back.

The pathology of these cases is obscure. Two possible theories might be suggested, viz.: That there is some actual communication between the lymphatics and the urinary passages, or that, as in the analogous case of the lipuria of diabetes, the condition of the urine depends upon some failure of assimilation. *Post mortem* records are very meagre, and throw no decisive light upon the condition. The clinical evidence is somewhat conflicting. In some cases the chylous urine occurs only after meals; in others, such as the present case, chiefly at night. It is to be noted that in my case if the patient took an afternoon sleep he was prone to have an attack. There is evidence that fatigue and full meals have a tendency to cause the appearance of chyle in the urine. A case is on record where lying on the right side prevented attacks. In another case attacks occurred only when the patient was in the erect position. Cases have been known to undergo arrest without assignable cause.

The prognosis is not unfavourable. Most cases last for many years, and do not seem to interfere seriously with the general health. It is noteworthy that wasting and progressive cachexia are hardly ever reported. There are no known consequences or complications.

The treatment of so rare a disease, and one of which the normal course is so obscure, is naturally unsatisfactory. There is no clear proof that any drug has any decisive influence. Iodide of potash has been recommended. Stephen Mackenzie advised a combination of sodium benzoate, gallic acid and tincture of iron. Gallic acid is recommended by other observers. Antiseptics seem without effect. Tonics have been given on general lines.

The improvement in my patient seems to have depended upon limitation of his excessive activities, moderation in diet, and precautions against sleeping on the back.

* Read before the Section of Medicine in the Royal Academy of Medicine in Ireland, on Friday, February 4th, 1916.

A GIFT of £3,000. to endow a ward to be named the Reginald Hirst Ward, has been made to Huddersfield Royal Infirmary by Mrs. Kate Edith Hirst, of Kirkburton, in memory of her husband.

THE RELATION OF PROGNOSTIC FACTORS TO TREATMENT IN DIABETES MELLITUS.

By NELLIS B. FOSTER, M.D.,
New York.

We are not in the habit of considering those factors which influence prognosis as intimately related to the problem of therapeutics. The reason we do not do so is because we customarily think in the terms of acute disease. The necessity of considering prognostic factors therapeutically is self-evident. When a man suffering from chronic renal disease is advised to seek a mild winter climate the physician is trying to avoid the danger to his patient from pneumonia. He considers a prognostic factor as a problem in preventive therapeutics. He may not ponder, but he knows that of individuals with chronic disease only a minority die of that disease—the majority, weakened and undermined in health, die of acute superimposed infections or of complications. The apt formula of a famous American physician on how to live to old age is pat: "Acquire a chronic disease and take care of yourself."

If, then, we are to advise intelligently patients with maladies such as chronic nephritis and diabetes, we must form a very clear estimate in each case as to just what the dangers are which menace his existence. This is necessary in order to carry out the prime endeavour of prolonging life—and it is no less requisite that we consider these factors in the means adopted to ameliorate the symptoms of the disease. The two goals of therapeutic endeavour—prolongation of life and the amelioration of symptoms, are secured but seldom by a change in the individual; not infrequently by a change in the environmental demand. Therapy directed to ætiological factors is at present almost unknown in the realm of chronic disease.

These principles find no better example than in the treatment of patients with diabetes mellitus. With this disease, perhaps more than with any other, the afflicted is out of joint with his environment; he can no longer eat or work with his brother man. We are apt not to think of it, but the condition is appalling. Every single human privilege is walled off by an adaptation to a narrowed function.

Now what are the dangers which beset the existence of the patient with diabetes? Numerically, infections take first rank and account, directly or indirectly, by precipitating coma for over 78 per cent. of the deaths. Elsewhere (*a*) I have called attention to the frequency of surgical infections, but I do not wish at present to limit my remarks to any one type. Even a slight cold becomes a very serious complication with a diabetic child; tonsillitis that would hardly confine a healthy man to the house has sent many diabetics to the grave. Tuberculosis is proverbially common among diabetics seen in hospital practice, less so among the well-to-do. Pneumonia, in my experience, has been invariably fatal, often because it precipitates acidosis and coma. Since these dangers which kill the majority of diabetics menace all alike, any mode of treatment which disregards these prognostic factors is lacking in foresight. Once contracted, infections are difficult in any case to combat, and often the fight is hopeless; the only safety is in keeping the patient in some condition approximating to normal vigour, so that infective agents find a less fertile soil. This principle concerning infections, as related to bodily vigour, is established, and finds no exception in the realm of chronic disease. Disregard of one ultimate aim of therapy in diabetes—namely, an approach towards a healthy state of resistance to infectious disease, so often leads to calamity that I am frankly pessimistic for that group of cases that can attain and preserve a sugar-free urine only at the expense of nutrition. With a sufficient number of cases it will, I think, be manifest that one danger has been exchanged for another.

There is no question in my opinion that the *average* diabetic not only has more comfort and sense of well-being when his urine contains no sugar, but that his actual resistance to infection is higher. I refer now to cases in middle life in which a severe glycosuria is not complicated by acidosis, and in which under-nutrition and loss of strength are the striking features. The majority of these cases regain strength and energy after the glycosuria is controlled. With others the diet which controls the glycosuria necessitates that the patient remain some 20 per cent. under normal weight, while with a diet which holds him but 10 per cent. under weight he has about fifteen grams of sugar daily in the urine. Now, which is the preferable condition? Neunyn said that he did not know, and I doubt if we do at present. Again, exercise benefits the majority, but some patients have slight rises in temperature after exercise, and without the exercise the tolerance is too low for safety. It seems to me that here we have questions not related to our ideals of treatment, but intimately concerned with the future of our patient, and they are best decided by remembering from what direction danger approaches.

As to whether a sugar-free urine indicates a state of affairs in the body economy which may be spoken of as holding the diabetic tendency in control, I have some doubts. There are facts which speak against it—as, for example, the frequency of pathological organic changes which develop after long periods during which the diabetes is apparently under full control. I refer to renal disease in the younger patients and nerve lesions in all. As a matter of fact, we are not able to effect the end we strive for. As proof that we are not overtaxing the body's powers to handle sugar, we customarily accept the fact that the urine does not contain glucose. But this is not the criterion. The real criterion is the percentage of blood sugar; and with any cases other than the mild ones the blood sugar remains above normal, and can be reduced to normal only during periods of excessively low diet or absolute fasting. In other words, there is a considerable margin between the maximal normal (0.14 per cent.) of blood sugar concentration and the threshold of renal permeability (0.16 to 0.17 per cent.): constant hyperglycæmia means a continuation of an abnormal state. We can successfully remove the overload, it is true, when we reduce the blood sugar from 0.35 or 0.45 per cent. down to 0.16 or 0.17 per cent., and with the majority of patients that reduction effects a wonderful change in general health. But 0.16 per cent. is not a normal blood sugar. The blood then, and not the urine, is the measure of whether the means we employ are suitable. With some of the severest and most hopeless cases that have come under my observation the urine contained no sugar at a time when the blood sugar, due to a concomitant kidney disease, was as much as three times the normal. Evidently the urine may mean nothing as to the diabetic state.

To excessive hyperglycæmia is, in my opinion, to be assigned a large degree of impairment of function, and this idea I can best make clear by an analogy drawn from chronic nephritis. It is a common observation that with these cases of chronic renal disease at periods before treatment, all the tests and the metabolism studies may indi-

(*a*) "Diabetes Mellitus." Philadelphia. 1915.

cate a hopeless degree of renal damage, the urea of the blood may be very high, and the phthalein excretion reduced to traces. After an appropriate regimen the same tests indicate a clear-cut increase in the ability of the kidney to perform its function. This phenomenon we may style a depression of function due to the overload. With diabetes the state of affairs is not very different. At times when there is marked hyperglycæmia the tolerance appears nil; after a couple of months of treatment, when the blood sugar is reduced to only a little over normal, there is often a surprising ability to use carbohydrate. For this reason I think it is impossible to tell in advance whether any given case is mild or severe. Many that seem severe in the beginning, even with considerable acidosis, prove after a year to be only mild. But this is true only when the disease is not of long duration. With cases in which the indications are that a year or two at most have passed before treatment is commenced, my results have been very encouraging when the patients could do what their disease demanded. For this reason I shall divide my cases into two groups—early and advanced. The severity of the acidosis or glycosuria with these cases in the beginning was no criterion of the actual conditions, and this is adequately demonstrated by cases that were infused at the commencement of treatment because of incipient coma. The history with these cases indicated about a year's duration of the diabetes. Some of these individuals are now using, on five days of the week, unrestricted amounts of starch without resultant glycosuria. One of them has a normal blood sugar, unless the routine vegetable day be omitted for several weeks. All are young, under thirty-five years, and all are up to normal weight and vigour. These and other cases I have studied illustrate the difficulty stated by Joslin in differentiating mild from severe diabetes. I know an old gentleman who was a severe diabetic at the age of twenty-two years. He is now nearly seventy, and has had no glycosuria for forty years. He was a patient of the elder Shattuck. In fact, I question whether the terms mean just what we wish to express when we speak of young patients with glycosuria and severe acidosis. Should we not rather say early and advanced? (The older cases are in a class by themselves in which acidosis is but seldom of moment, even when of considerable degree, as Neunyn pointed out.) My experience of the last five years has been that with young adults who came under observation early after the disease was recognised, all have secured sugar-free urines, notwithstanding severe acidosis at the start, and all who followed advice have recovered a considerable degree of tolerance for carbohydrate, much above what it was in the beginning of treatment.

Concerning the cases of young adults, four to five years of age, who were observed first when the disease was of some years' duration—that is, advanced cases—the results have not been encouraging, even when, as often happened, on account of but slight acidosis, it appeared in the beginning that the task was much easier than with some of the early cases. The glycosuria may be easily controlled, but the blood sugar is difficult to reduce to normal, and it remains normal only under the most restricted conditions. As a rule, the tolerance secured is too meagre to preserve health over long periods. My observation indicates that with this group those patients who have adhered to diet have died of complications and infections wherein coma occurred only as a sequel to acute disease—*i.e.*, pneumonia or *la grippe*. Of those who have not been so rigidly dieted or who have not observed diet with due care the majority have died in coma. The period of life in both groups averages over two years from the beginning of the treatment. An estimate of value of treatment as measured in years of life can be discovered only by a very large number of cases observed for years. The point is that with advanced cases in young persons the results are discouraging even when the disease is apparently under control. And I might add here that this statement applies also to diabetic children. Cases now living that have been for several years ideal, so far as absence of glycosuria indicates, are under height, under-nourished, and altogether most pathetic.

One interpretation of these facts as I understand them is this: That with early cases we can expect much from treatment. Vigilant control of the diet so that glycosuria is absent and the blood sugar down to nearly normal is justified, since with time tolerance increases. Even a dangerous degree of acidosis does not necessarily frustrate this design. This interpretation rests on the hypothesis that I have stated earlier in the paper—namely, that the hyperglycæmia itself induces pathological function. The alternative interpretation is that these early cases that are now doing well will eventually deteriorate and become the typical advanced case. It will take years to decide this point, but against this contention is the increased tolerance for carbohydrates observed as years go by. It is to be remembered, however, that some young adults with severe diabetes and considerable acidosis live six to ten years under the less stringent methods which aim only to keep sugar excretion low, but never abolish it completely. But it is my belief that with those cases in which the diagnosis is made early much can be accomplished by vigorous treatment. It matters not whether the blood sugar be reduced by the rapid method of complete fasting or by the slower method of periodic fasts; the end that must be attained is a sugar-free urine, blood sugar as near normal as possible, and an absence of acidosis.

The chief danger lies in the after period, when, because the urine is so persistently normal, patients, and even physicians, are led to doubt the necessity of the diet, with consequences that are sometimes serious. With young patients, early or advanced, the danger to be feared is acidosis, and our therapeutic endeavours are directed to prevent its development or abolish it after development. When there is no acidosis I have never been compelled to resort to fast days as a means of controlling the most extreme glycosuria, although there is no doubt the end can be attained most rapidly by the complete withdrawal of food. The question is, then, is starvation always safe? It has been generally believed, and was emphatically stated by Neunyn, that an acidosis tendency once established is prone to recur. With diabetics as with normal persons, starvation induces acidosis, and even this, I think, can and should be avoided, since one cannot tell where it may lead. Cases that I have seen in consultation have made me more definite in this impression. In two recent instances an alarming acidosis, initiated by fasting, necessitated heroic measures which availed to save the life of only one patient. These unfortunate issues we are not at present able to prevent, unless the patient be in a hospital, and adequate warning of danger be watched for in the laboratory studies.

Turning now to cases in which acidosis dominates the picture, and in which the disease is of long duration, the therapeutic problem is again different. The menace here is coma, and the fact that any of the patients can be relieved of their danger, even for a brief time, by fasting is a remarkable contribution to our knowledge of diabetes. With cases that are in imminent danger of coma, in which each day may be the last, a measure that promises any success at all is of the greatest value; and here, I

believe, is the special field for the fasting method. That fasting in itself may be a dangerous procedure, we recognise; as are also serious surgical measures. There are occasions when we have scant choice. That the fasting treatment is not devoid of hazard we must recognise, and it throws upon us the responsibility to use this method only when other and less drastic methods are inadequate to effect the desired result; and to recognise that fasting is, again, like many surgical measures, suited best for use in well equipped hospitals, in which careful observation and frequent tests of blood, urine, and alveolar air are made as part of the routine. Only in this way can dangerous reactions be foreseen and requisite measures be instituted. The treatment is fundamentally a treatment for grave acidosis.

Finally, then, I can summarise my conclusions: Every case of diabetes demands the most careful study not only of the diabetic state, but also of all conditions which may influence the future health of the patient. Infections must be kept in mind as the constant danger. Early cases must be kept free of glycosuria in order to raise resistance and to avoid the development of acidosis. This can be done even in face of acidosis by the use of restricted low diets. With advanced cases glycosuria must be controlled in order to regain normal weight and vigour. When there is grave acidosis this also can now with many cases be successfully abolished. The chief difficulty in treating all diabetics is the necessity of constant vigilance over years.

THE CORRELATION BETWEEN OLFACTORY AND GENITAL FUNCTIONS IN THE HUMAN FEMALE.

By J. A. HAGEMANN, M.D.,
Pittsburgh, Pennsylvania.

The existence of a correlation between certain intranasal tissues and the generative organs has long been a matter of universal medical knowledge. Perhaps the qualifying term "medical" is too limiting, for to many of the laity as well it is known that such an alliance exists. Althaus ("Beitraege zur Physiolog. und Pathol. des Olfactorius") speaks of the mutual attraction of animals of opposite sexes for each other by olfactory perception of distinct odours at the period of rutting.

The symptomatology so far as it pertains to the male sex will intentionally be disregarded in this paper. In April, 1884, Dr. J. N. Mackenzie, in the *American Journal of the Medical Sciences*, published some physiological and clinical observations which he had made, and stated that "in certain women with normal olfactory organs regularly with menstruation a swelling of the erectile tissue of the nose occurs, that menstruation is at times replaced by epistaxis, and stimulation of the genital tracts is occasioned by affections of the nasal organs."

It remained, however, for Fliess, of Germany, to amend the imperfect knowledge which then prevailed regarding the dependency between certain functions of the nose and those of the female procreative organs. In 1887 he published a paper on "The Relation of the Nose and Female Genitalia," in which he affirmed that certain "genital spots" could be determined in the nasal mucous membrane, and that the anæsthetisation of these spots by the local application of cocaine would in many cases result in relief from the agonising pain of dysmenorrhœa, provided the same was not due to an obstruction of the cervix. The spots designated are the tubercle of the septum and the anterior part of the inferior turbinate. Later, Fliess had recourse to employment of the galvanocautery or trichloracetic acid in an attempt to lend permanence to the transitory palliation which cocaine bestowed. His postulate excited animated discussion throughout Europe. Kuttner criticised Fliess' theories unsparingly, pertinently asserting that it was unreasonable to admit that a controlling spot located in the nose, should surpass and supersede any cerebral or spinal centre. Many other European authorities also entered the lists for and against Fliess' assumptions.

His latest brochure consists essentially of a reiteration of his tenets, an arraignment of his detractors, and an augmentation of his theoretical intranasal genital centres by the addition of another centre dominating the abdominal pains experienced by self-polluting girls. After stating that the primary changes in the nasal genital spots are frequently of an infectious nature, and admitting that these changes are not the sole solution of the distal manifestations (dysmenorrhœa), he adds that "the anatomy of this neuralgic conversion is as unsolved as the nature of the structural change, for example, in neuralgia of the trigeminus or ischiatic nerve." In essaying to substantiate his postulate by producing evidence of anatomical relationship, Fliess says: "In the nose the erectile bodies are under control of the sphenopalatine ganglion, which receives sympathetic fibres from the carotid plexus through the petrosus profundus nerve. There would thus be an anatomical path to the sympathetic, which controls the sexual functions as well."

In the absence of an affiliation with a gynæcological clinic, the writer has not had adequate opportunity afforded to verify or confute, to his own convincement, the conclusions of Fliess; but nasal phenomena analogous to, yet differing from those described by him, have been encountered by me a number of times. The specification of these phenomena and their interpretation is the *raison d'être* of this paper.

It may not be amiss to interpose here, by way of premise, a compend of some of the more relevant præcognita.

The olfactory sense indubitably exercised a paramount influence in the survival and development of the primæval zoological forms which were wafted to and fro by the waters of the "vasty deep" in the earliest faunal geneses. The low forms of animal life which had progressed beyond the amœbic stage, and in which there had been evolved an incipient tactile sense, would in the prevailing course of events gradually develop a discriminating faculty which would, at an early period, subserve the selecting of nourishing, and later of savoury food. Coeval with this development there would be revealed the earliest traces of sexual evolvement, for sustentation and propagation in binary, rudimentary form, constituted exclusively the functions possessed by these primitive embodiments of animal life. One can readily realise that in this elementary stage of evolution through which the primal forms of life were passing, there could be no great development of a selective faculty.

It is, however, conjectural that a mere specific sense, if any, developing gradatim from the rudimental tactile perceptivity, would be in the nature of an olfactory faculty. In other words, as the incalculable successive generations of animalcules became more highly organised, a capacity to choose palatable food and perceive a conjugal mate must imperceptibly, but unintermittently have become established; so that, by slow degrees, the nascent organisms became both sensory and sensuous. If we pass over a diuturnity and study animals high in the scale of evolution we encounter the culminating degree of this development. To review even cursorily the interminable intermediate trans-

itional forms would be a stupendous task. Let it suffice to say that this binate faculty, so common in primary forms, is retained by many that have progressed sufficiently no longer to require either or both capabilities in the struggle for existence. The males of a considerable number of mammals possess odoriferous secreting glands, which in various species are situated in different parts of the body. In certain ones the odour becomes more evident during the breeding season. It is confirmed that the females of these several species, during the rutting season, lustily exercise their olfactory endowment while experiencing a disposition to associate with the males. The consequent hyperæmia of the olfactory area conformably produces tumescence and hypersecretion in this section of the nose. It seems idle to seek an anatomically linked bond, via the nervous system, between the olfactory and conjugal functions, for these developed contemporaneously, in multiform alliances among low as well as higher forms of life, according to the several requirements of the respective organisms.

If we contemplate that the perception of savoury odours "makes the mouth water," that hearing a patriotic air may produce profuse lachrymation, that the witnessing of a touching scene may cause a "lump in the throat," all involuntary and presumably irrelevant sequences, we realise the futility of speculating upon an anatomical vinculum. It is more to the purpose for us to keep in mind that some brain centres apparently perform dual offices, or that two centres controlling different faculties act in unison in response to a stimulus from either of the distal areas whose functions they control. In the example under discussion, a sexual incitement may give rise to swelling of erectile bodies in the olfactory region; or, conversely, certain odours perceived by the olfactory nerves may set up hyperæmia in the genital organs. Moreover, in some forms a concordant execution of both functions is probably habitual.

When pondering the foregoing data it does not seem extravagant to propound the paradoxical theory that the olfactory excitation which occurs in some young women may be regarded as one expression of atavism. These residual nerve-functions, remainders of once active and essential faculties possessed by our ancestors, are now latent and dormant, and have long, long ago ceased to be proficuous. However, eradication of a dispensable function is consummated only after interminable periods of time, and irregularly there occurs a vestigial resurgence of one or another feature of atavism.

If one keeps in mind the foregoing postulate while scanning the following summary, an apparent corroboration of the theory above advanced is marked. Where an unequivocal correlation between nasal and genital functions exists, the pain and tumescence are found chiefly near the anterior portion of the middle turbinate and the section of the septum diametrically opposite and above this point. The turgescence observed in the lower part of the nose is probably due to continuity of the connective tissue by reason of which transcolation of the fluids takes place from above.

Reduction, by cocaine and adrenalin, of the turgescence over the inferior turbinates in two salient nasogenital cases did not notably alleviate the distressing pain and sensation of pressure which was complained of at the portion of the nose between the eyes, whereas application of the same solution to the olfactory field afforded prompt, but only transitory, relief.

Bilateral œdema of upper and lower eyelids that had manifest genital dependency twice subsided within a few hours after application of cocaine and adrenalin solution to the olfactory field. In this instance there evidently was a dehiscence in the laminæ papyraceæ, permitting a "damming out" of the fluids which the limited space within the nose could not contain.

Surgical treatment by means of inferior turbinotomy or turbinectomy, will, in a disconcerting number of cases, fail to benefit the class under discussion, whereas removal of the anterior half of the middle turbinate, supplemented, if necessary, by a submucous resection of the septum, secures permanent deliverance from the recurrent attacks. His clinical observations, differing in several respects from some published by other writers, and his deductions, arrived at from disparate premises, are the writer's plea in justification of this paper.

CLINICAL RECORDS.

FRACTURE OF THE FIRST RIGHT RIB.

By THOMAS P. CODD, L.R.C.P. AND S.I.

As this is a very rare accident I thought it of interest to report a case. A lady about 45 years of age received personal injuries in a collision between two vehicles. She complained of a pain on movement of the right arm. There was a swelling over the right breast, not at the site of fracture. The swelling was painful on examination, she had flying pains across the chest, under the right shoulder joint, and up and down the back. There was no deformity about the clavicle, and the fracture was in good position, which would be expected, considering the association this rib has with muscles and ligaments. Sir Thomas Myles consulted with me in the case. He suggested the X-rays, which revealed this most difficult injury to diagnose. As this rib is so closely related to important blood-vessels, it is surprising that there was not a rupture of some of the principal vessels, and death from hæmorrhage, or later on the formation of an aneurysm, as it is so near the aorta. The patient is doing well, only complaining of a pain down the arm occasionally and effect of shock to the nerves.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

MIDDLE EAR DISEASE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In reference to the letters in your issues of January 26th and February 23rd, I would suggest that many cases of inflamed middle ear are due not so much to simple extension from the naso-pharyngeal end of the Eustachian tube as to the blowing of infected mucus up that passage. During an acute or subacute nasal and naso-pharyngeal catarrh, when there is discomfort in the ears, and even when there is not, people are apt to blow the nose forcibly to get temporary relief. They should be warned to blow only gently, and to avoid compressing the nostrils at the beginning of the act. It may be feared, too, that by some practitioners Politzer's inflation is done at such times without consideration of this possible consequence.

I am, Sir, yours truly,

M. D. J.

London, N.W.,
February 26th, 1916.

THE LATE PRINCIPAL SIR WM. TURNER.

To the Editor of The Medical Press and Circular.

Sir,—Your appreciation of the late Principal of Edinburgh University will be read with interest by old Edinburgh men all over the world. I have not seen, in any obituary notice, reference to one of Turner's marked characteristics—viz., his power of discipline. A large class of second year medical students is not easy to handle. Turner kept perfect order without having to expostulate or correct. He did so entirely by the power of his eye. He only looked, and the offender felt "squashed." In this respect, Turner resembled his old colleague, the late Professor P. G. Tait.

I am, Sir, yours truly,
Radius.

THE CENTRAL MEDICAL WAR COMMITTEE.

To the Editor of The Medical Press and Circular.

Sir,—The *Evening Standard* of February 21st refers to the above body as a "representative committee of the medical profession." It cannot be too widely known that this Committee has no authority to speak or act for the profession. It is self-appointed, and its energies at present appear to be directed to "jumping" medical men into military service. The B.M.A., from which this precious coterie springs, evidently learned something from the Insurance Bill tactics of Mr. Lloyd George.

I am, Sir, yours truly,
Baton.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of State Medicine.

Meeting held Friday, January 7th, 1916.

The President, W. A. Winter, M.D., in the Chair.

PHYSICALLY DEFECTIVE CHILDREN AND THE PROBLEM OF THEIR EDUCATION.

The President gave an address on the above subject, which was printed in The Medical Press and Circular of February 9th.

Dr. Kirkpatrick drew attention to the success of the school held in connection with the Orthopædic Hospital, Dublin. The teaching of the children there had proved of benefit, not only to the education of the children, but also to their medical treatment.

CERTIFICATION OF INSURED PERSONS IN IRELAND.

Dr. Rowlette read a paper on this subject which was printed in The Medical Press and Circular of February 23rd.

Dr. Maurice Hayes pointed out the importance of the principle that none but the medical attendant should be required to certify for his own patients.

Dr. Hennessy called attention to the great importance of the ethical triumph which the profession had attained in the recent decisions of the Irish Insurance Commissioners.

Mrs. Ellen Constance Soames, of Porchester-terrace, widow of Captain Henry Soames, R.A., gave £100 each to the Children's Hospital, Northcourt, Hampstead, and the Disabled Soldiers' and Sailors' Help Society.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Anatomy and Physiology.

Meeting held Friday, January 14th, 1916.

Dr. T. P. C. Kirkpatrick in the Chair.

OSSIFICATION OF THE THORACIC VERTEBRÆ IN MAN.

Professor A. Francis Dixon read a short note on the above. He showed that the epiphyseal plates which appear on the upper and lower aspects of these vertebræ extend on to the lateral aspects of the bodies so as to give rise to the articular facets for the heads of the ribs. In this particular, the epiphyseal plates in man, although they in other ways appear to be vestigial, conformed to the arrangement which obtains in lower animals. A number of specimens from the human subject were exhibited, and also several from various forms of lower animals. A striking agreement, as regards the ossification of the costal facets, was demonstrated to exist in the various forms, including man.

Dr. Holtby referred to the fact shown in Professor Dixon's specimens that the costal articular facets seemed to be losing their connection with the epiphyses.

THE HISTOLOGY OF THE PANCREAS OF A CAT, THE SUBJECT OF GLYCOSURIA.

Professor Thompson read a note on the above. Specimens were exhibited showing an apparent increase of islet tissue in many of the lobules. In others the islet cells had atrophied or wholly disappeared. On the whole the islet tissue seemed largely increased. It was difficult to bring this into harmony with the present theories of pancreatic diabetes, but the suggestion was made that possibly an increase of the anti-diabetic hormone might also disturb the function of the liver cell in regulating the processes of glycogenesis and glycogenolysis.

Professor Mettam mentioned the appearances found in the organs of a dog which had died of diabetes, where the islets of Langerhans were totally absent.

THE PELVIC COURSE OF THE DUCTUS DEFERENS.

Dr. Holtby read a preliminary note on the above, and referred to the fact that the ductus deferens showed, when the bladder was empty and contracted, a distinct kink in its course, this kink lying opposite the ischial spine, below and behind the ureter along the posterior margin of the para-vesical shelf. In children at birth, the ductus showed two curvatures—one a transitory one where it crossed the then prominent hypogastric artery, the other at the point where it passed over the ureter. The latter was the one found in the adult in whom it had come to occupy a lower level. He found constantly a definite branch of the superior vesical artery passing inwards, reaching the ductus just distal to (*i.e.*, on scrotal side of) the kink, and there dividing in a V-shaped manner, one branch going upwards along the ductus, the other passing to the interval between the horizontal portion of the ductus and the seminal vesical giving twigs to both. No branch passed to the region of the kink.

He considered that the cause of the kink was the impinging of the ductus against the ureter when its course was changed by the descent of the testicle, and that the curvature was provided for and maintained by the peculiar distribution of the artery referred to.

THE DAILY FOOD RATION OF GREAT BRITAIN.

Professor Thompson made a communication on the above. From a survey of the total food supply of Great Britain for the year of the first census of

production (1908) the only year for which it was so far possible to make anything like an accurate computation, the daily food supply per man of the population, as calculated from the returns, came out to be as follows :

Flour and meal	14½ ozs.
Flesh meat	8 ,,
Fish	2 ,,
Potatoes	15½ ,,
Other vegetables	4¾ ,,
Milk	⅔ pint.
Butter	1 oz.
Cheese	½ ,,
Condensed milk	⅓ ,,
Less than half an egg	
Fresh fruit	... 3 4/5 ,,
Dried fruits and nuts	½ ,,
Cocoa and chocolate	1/10 ,,
Salad oil	... 1/100 ,,

This ration provided the following :—

Protein.	Carbohydrate.	Fat.	Energy value.
101.49 grms.	587.12 grms.	136.36	4,127 calories.

The returns did not, however, include all the home supply of cheese, eggs, poultry, or rabbit meat. The estimate of green vegetables consumed as human food, particularly of cabbage, was probably also too low. Making additions to cover these omissions, would bring the ration up to :—

Protein.	Carbohydrate.	Fat.	Energy value.
104.26 grms.	587.84 grms.	138.83 grms.	4,167 calories.

As a fair estimate it would be safe to say that the British food ration per *man* per day did not exceed

Protein.	Carbohydrate.	Fat.	Energy value.
105 grms.	590 grms.	140 grms.	4,190 calories.

Making deductions for loss in distribution, the value of the ration, as purchased, would approximately be :—

Protein.	Carbohydrate.	Fat.	Energy value.
97 grms.	345 grms.	132 grms.	3,875 calories.

This did not provide more than enough for moderately hard muscular work. Dr. Langworthy placed the energy value of the ration, as purchased, for light work at 3,800 calories. The ration was remarkable in the relatively large amount of fat it contained, but in this respect it corresponded closely with the estimate of the German food supply before the war, as published by the Eltzbacher Committee. Two conclusions were drawn, namely—(1) that the tendency in urban and industrial populations was to increase the consumption of fat at the expense of the protein; and (2) that the ration could not well be reduced without endangering the efficiency of the working man. Economy could, however, be introduced by substituting protein from vegetable sources for a further part of the more costly meat supply.

OBITUARY.

DEPUTY SURGEON-GENERAL E. F. O'LEARY, M.D., M.R.C.S.

DEPUTY SURGEON-GENERAL EUGENE FRANCIS O'LEARY died at Audley, Sidmouth, on February 20th, in his eighty-first year. Qualifying M.R.C.S.Eng. in 1856, he entered the army in the same year, and was placed on the Retired List, December, 1883. He served many years in India and China, and in the Egyptian campaign of 1882, for which he received the medal and the Khedive's Star. In 1870 he graduated M.D., R.U.I.

SURGEON-GENERAL C. E. McVITTIE, L.R.C.P.Ed., F.R.C.S.I.

THE death has taken place at Exmouth of Surgeon-General Charles Edwin McVittie, an honorary physician to the King, late of the Indian Medical Service. He qualified as licentiate of the Royal College of Surgeons, Ireland, in 1865, and of the Royal College of Physicians, Edinburgh, in 1866, being elected a fellow of the Royal College of Surgeons, Ireland, in 1874. He joined the Indian Medical Service in Madras, and served in the Afghan War in 1880, for which he had the medal, and with the Burmese Expedition in 1886-7, when he was mentioned in despatches and received the medal with two clasps. He reached the rank of surgeon-general in 1895, and retired in 1900. Surgeon-General McVittie was an honorary physician to Queen Victoria from 1898 till 1901, to King Edward during his reign, and to the present King since his Majesty's accession to the Throne. He was given a distinguished service reward in 1894.

DR. GEORGE VALENTINE, M.B., C.M., GIRVAN.

THE Kingdom of Carrick is poorer to-day by the death of Dr. Valentine. He had been in somewhat failing health for the past two years, but was able to do the more important part of his work till a fortnight ago, when he was suddenly seized with apoplexy, which proved fatal in a few hours. He was a native of Stonehaven, where he was born 68 years ago. Graduating at Glasgow University in 1873, he began practice in South Ayrshire over forty years ago, as Medical Officer of the Parish of Girvan. He was a Medical "Kim," the friend of all the world. Genial and likeable in his disposition, he was most shrewd and wise, and though the latest mechanical devices of our art were more or less unfamiliar to him, his opinion on a case, medical or surgical, was well worth hearing. He was a fine type of the old country doctor at his best. He is survived by a widow, two daughters and six sons, two of whom are in the medical profession.

DR. A. T. CAMPBELL, M.B., C.M.Glasg.

THE death occurred, on February 22nd, at Glasgow, of Dr. Archibald Thomson Campbell. Dr. Campbell, who had been in ill health for some months, had been on military service since the beginning of the war. He held a commission in the Home Hospitals Reserve, R.A.M.C., and on the outbreak of war he was called up. He was posted to Maryhill Barracks, and with the rank of captain served there till the state of his health compelled him to go off duty. Dr. Campbell qualified M.B., C.M. at Gasgow in 1886, and began practice in that city in 1888. He took an active part in the work of the various professional organisations. He held at different periods the offices of President of the Glasgow and West of Scotland Branch of the British Medical Association, President of the North-Western branch of the same body, and President of the Northern Medical Association. At the time of his death he was Chairman of the local Medical Panel Committee under the National Insurance Act, in the activities of which he was very keenly interested. He was also one of the representatives from Glasgow to the British Medical Association in London. Dr. Campbell is survived by his wife and a family of three.

DR. C. L. H. PEMBERTON, M.D., M.R.C.S., L.S.A., BANBURY.

THE death took place, on February 15th, of Dr. C. L. H. Pemberton, the senior medical practitioner of Banbury. Beginning practice between 50 and 60 years ago, he gained a wide reputation in his skilled treatment of pneumonary disease. He was trained at Birmingham and Paris, qualifying M.R.C.S. in 1857 and L.S.A. in 1858. In 1896 he took the M.D.Brux. degree. Dr. Pemberton practised alone for many years, and during that time several medical institutions were aided largely by his knowledge of their need and requirement. The Horton Infirmary was in 1870 his interest, and after 26 years of voluntary service, during which he saw the institution extend its good work, he became the Honorary Consulting Medical Officer, an office retained until his death. The Banbury Nursing Association was equally indebted to his work, and he occupied the presidency until comparatively recently. Eleven years ago he retired from active professional duty. The deceased was 80 years of age.

DR. R. MILNTHORPE, M.R.C.S., L.R.C.P., LEEDS.

Dr. Richard Milnthorp, of Leeds, died from pneumonia on Feb. 18th, at the early age of 41. Educated at Leeds, he qualified M.R.C.S., L.R.C.P. in 1900. During the Boer war he acted as Surgeon with the temporary rank of captain, and for a few years after his return he was Surgeon to the soldiers at Chatham. He spent a short time in Batley and Dewsbury before settling down in Leeds. At the outbreak of the present war he offered his services to the military authorities, but his state of health was such that he could not be accepted. He was married, and is survived by his widow and one boy.

DR. A. CARMICHAEL, M.A., M.D.

Dr. Archibald Carmichael, of Barrow, has died suddenly at Perth. He had been in practice in Barrow since 1871, and retired just over a year ago. He graduated M.B., C.M. at Aberdeen in 1871, and M.D. in 1873. He was Medical Referee under the Factory Acts and Workmen's Compensation Act. He was 69 years of age.

SPECIAL REPORTS.

FRENCH AND BELGIAN HONOURS FOR BRITISH DOCTORS.

FRENCH DECORATIONS.

LEGION OF HONOUR.

The President of the French Republic has bestowed the decoration of the Legion of Honour, with the approval of His Majesty the King, on the following officers, in recognition of their distinguished service during the campaign:—

Croix de Commandeur.

Surg.-Gen. W. G. Macpherson, C.B., C.M.G., M.B., K.H.P.; Col. Sir W. B. Leishman, C.B. F.R.S., A.M.S.

Croix D'Officier.

Col. C. H. Burtchaell, C.M.G., A.M.S.

Croix de Chevalier.

Maj. W. R. Battye, D.S.O., M.B., F.R.C.S., I.M.S.; Maj. R. B. Black, M.B., Res. of Off., R.A.M.C.; Maj. J. S. Pascoe, R.A.M.C.; Maj. E. Ryan, D.S.O. R.A.M.C.; Maj. J. W. West, M.B., R.A.M.C.; Capt. F. Casement, M.B., R.A.M.C.; Capt. D. M. McWhae, Australian A.M.C.; Capt. (temp. Maj.) J. Morley, M.B., F.R.C.S., R.A.M.C. (T.F.); Lt. (temp. Capt.) J. W. Craven, R.A.M.C. (T.F.).

BELGIAN DECORATIONS.

The King has been graciously pleased to grant unrestricted permission to the undermentioned Officers to wear the decorations specified, which have been conferred by his Majesty the King of the Belgians for distinguished service during the campaign:—

Surg.-Gen. Sir Arthur Thomas Sloggett, K.C.B., C.M.G,. K.H.S.—Commandeur de l'Ordre de Leopold; Surg-Gen. Robert Porter, M.B.—Commandeur de l'Ordre de la Couronne; Col. Samuel Guise Moores, C.B., Army Medical Service.—Officier de l'Ordre de Leopold; Lt-Col. S. L. Cummins, C.M.G., M.D., R.A.M.C.—Officier de l'Ordre de la Couronne; Lt.-Col. A. Chopping, C.M.G., R.A.M.C.—Officier de l'Ordre de la Couronne.

HONOUR FOR NAVAL MEDICAL OFFICER.

The King has further been graciously pleased to approve of the award of the Distinguished Service Cross to:—

Surg. Alfred Robinson MacMullin, R.N., for his services on January 23rd, 1916, at Serengeti, in East Africa, when he showed remarkable bravery in searching for and rescuing a severely wounded officer under heavy machine-gun and rifle fire close to concealed enemy entrenchments

REVIEWS OF BOOKS.

VENEREAL DISEASES (*a*).

One is led to expect much that is original and of interest from a book that bears so promising a title and is written by so well-known a writer. Those who read this work will find that this expectation is more than justified. Mr. McDonagh is not afraid to discard generally accepted theories and to replace them by others founded upon his own personal observation and research work. There is no question that he is a keen observer and an untiring worker, but whether he is always justified in his deductions is a matter which must necessarily for a time remain in suspense. The opening chapter gives a brief but interesting history of the search for the organism of syphilis, and gives the author's reasons for thinking that the Spirochæta pallida of Schaudinn and Hoffmann is only one stage in its life-cycle. Mr. McDonagh claims to have worked out the whole life-cycle of the organism, and has named it the Leucocytozoon syphilidis. He shows many excellent plates and photographs of its various stages, and explains how its chemistry and different phases throw light upon previously unexplained phenomena of syphilis. The Wassermann reaction and the other tests for syphilis are thoroughly discussed, and the chapter on the *rationale* and significance of the Wassermann reaction is well worthy of the most careful study. The author very fully describes the clinical and pathological aspects of both acquired and congenital syphilis in the various parts of the body. He divides the disease into four stages, the initial, the generalisation, the latent, and the recurrent, and advises the adoption of this instead of the existing classification. He also tells us that the type of chancre often affords a guide to prognosis and treatment.

The other venereal diseases and non-venereal conditions which may come under the notice of a venereal specialist are very adequately considered. Those chapters devoted to gonorrhœal infection are especially interesting. The pages on general neurasthenia form very valuable and instructive reading. In the two final chapters in this part of his work the author gives his views on the eugenic aspect of venereal disease in relation to marriage and public health.

In the second part of this book Mr. McDonagh brings forward evidence to show how some of the protective phenomena of the body, when carried to excess, may lead to the occurrence of malignant disease. In this work the author supports his various deductions with the histories of nearly a hundred of his cases and by many excellent coloured plates and photographs.

The book, which is particularly well printed and illustrated, bears the stamp of Mr. McDonagh's personality, and is well worthy of careful study, not only by those who will eagerly agree with its many new ideas, but also by the more conservative members of the medical profession. We cordially congratulate Mr. McDonagh upon a work which represents a vast amount of exacting labour and original thought; neither specialist nor general practitioner can afford to remain ignorant of the advance which it represents.

THE SECRET OF HUMAN POWER. (*b*)

It was said of the late James Hutchison Stirling, when he wrote a book on "The Secret of Hegel," that if he knew the secret, he kept it to himself. We fear that Mr. Haydn Brown has left himself open to a similar criticism. We have read his book with considerable care, and we regret to say that we have been unable to form any real conception of what he considers to be his message. Our difficulty is made greater by his lack of arrangement and by his extraordinary style. The book is made up of a number of chapters or discussions on various subjects, between

(*a*) "The Biology and Treatment of Venereal Diseases and the Biology of Inflammation and its Relationship to Malignant Disease." By J. E. R. McDonagh, F.R.C.S.Eng. Pp. 625, Plates 54. London: Harrison and Sons. Price £1 5s. net.

(*b*) "The Secret of Human Power." By Haydn Brown. Cr. 8vo. Pp. 328. London: Geo. Allen and Unwin. 1915. Price 5s. net.

which we are unable to discover any logical relation. The split infinitive is the smallest of his crimes of style, the ordinary rules of grammar being treated without any respect. Opening the book at random to choose a typical example of Mr. Brown's writing, the following sentence first caught the eye:—"It is a pretty sight, and an instructive exposition of reflex action having the purpose of saving a fall by entangling its fingers and clutching its hands in something should the mother in parturition drop it a distance away from the ground." We have been unable to discover the meaning of the diagrams which are intended to illustrate psychological processes. There is, of course, in the book a good deal of sound if somewhat commonplace advice, and Mr. Brown backs his opinions by extracts from many teachers varying in authority from Marcus Aurelius to Mr. T. P. O'Connor.

DISEASES OF CHILDREN. (a)

DR. STILL'S work, "Common Disorders and Diseases of Childhood," having reached its third edition in five years, may be said to have passed from the reviewer's hands, and to have been definitely accepted by the medical profession. We have merely to say to those who do not know the book that it is well worth their study, and to tell the many readers of former editions that the new edition is, if possible, better than the old. New matter has been added, and old opinions have been sifted in the light of further experience, so that, besides being more complete, the book is more trustworthy than ever. We predict for Dr. Still's work a long and useful career.

LITERARY NOTES.

MESSRS. H. K. LEWIS AND CO., LTD., announce for early publication the following books:—

"Localisation by Röntgen Rays and Stereoscopy," by Sir James Mackenzie Davidson; it is fully illustrated with stereoscopic and other pictures. "The Pathology of Tumours," by Dr. E. H. Kettle, with 126 illustrations from original drawings and other material. A new volume of essays by Dr. T. B. Scott, entitled "Modern Medicine and some Modern Remedies," to which Sir Lauder Brunton has contributed a preface. "Notes on Galvanism and Faradism," by Dr. Magill, intended for masseuses, and fully illustrated. "The Adolescent Period: Its Features and Management," by Dr. Louis Starr. A new editon (the fourth) of "Mentally Deficient Children," by Dr. G. E. Shuttleworth and Dr. W. A. Potts; revised and in part re-written, with increased illustrations. A new (seventh) edition of Gould's well-known "Pocket Medical Dictionary," containing an additional 1,000 words (35,000). A revised and greatly enlarged edition of Dr. Herbert Tilley's "Diseases of the Nose and Throat" is in the press. The seventh edition of Binnie's "Operative Surgery" will be ready early in March; it has again been thoroughly revised. A small but important new book by Dr. Russ on "A New Treatment for Gonorrhœa" is also nearly ready.

* * *

More than two-thirds of the January issue of the *British Journal of Surgery* (John Wright and Sons, Bristol. Price 25s. per annum.) consists of contributions to the surgical literature of the present war. That these contributions are valuable and authoritative goes without saying, since they come from the pens of eminent civilian surgeons, whose services have been specially retained by the War Office as consultant surgeons with His Majesty's Forces. Surgeon-General Sir Geo. Makins contributes a lengthy and informing report on the various vascular lesions which have come under his notice during the past year of war: he specially comments upon the devastating nature of these injuries, when compared with the relatively limited type of lesion encountered during the South African campaign. His observations on the terribly destructive effect of modern projectiles are amply confirmed in Surgeon-General Sir Anthony Bowlby's Bradshaw Lecture on Wounds in War, which is reproduced in this issue. To a wide and varied experience of civil surgery both these surgeons can claim the additional advantage of military experience gained during the South African campaign, and each has found the condition of wounds in these two campaigns to be widely different in nature. The radical difference of terrain suffices to explain the almost universal sepsis which came as such a surprise to the younger generation of surgeons on the outbreak of this war, and the higher velocity and greater instability of the modern rifle bullet would appear to produce much more smashing and rending of tissues than did the bullet of fourteen years ago.

In general, wounds received in South Africa were much less severe, and liable to far less serious complications than those with which most of us to-day are only too familiar. The special characteristic of the modern gunshot wound is the rending asunder of the tissues penetrated, largely due to the wave of compressed air which the bullet drives in front of it, and which expands within the tissues. Hence the injury inflicted is not confined to the track of the penetrating missile, but is diffused in every direction, radiating through all the surrounding tissues. Such extraordinarily far-reaching effects are well illustrated in certain cases cited by Sir A. Bowlby where intestines have been actually found torn open by bullets without the peritoneal cavity having been opened. The grave complication of a most persistent type of sepsis is incurred in every one of these wounds, and their treatment by modern aseptic methods would appear to have been uniformly disappointing. The views of Sir A. Bowlby and of Sir Watson Cheyne show that a reversion to vigorous antiseptic methods, combined with a system of free drainage, is absolutely essential for their successful treatment. Dr. Grüner's researches on the behaviour of the leucocytes in malignant disease are worthy of attentive study, and his paper is beautifully illustrated. Major Warner contributes a not untimely warning on some of the dangers of drainage tubes.

LABORATORY NOTES.

COMPOUND MENTHOL SNUFF.
(BURROUGHS WELLCOME AND CO., SNOW HILL BUILDINGS, E.C.)

COMPOUND Menthol Snuff (B. W. and Co.) has long been employed in the treatment of common colds, hay fever, and other nasal conditions. It has hitherto been put up in enamelled metal boxes, shaped like a snuff-box, and provided with an inner cardboard container. For use in temperate climates this packing has been found perfectly satisfactory and convenient, and will be retained. In tropical countries, however, certain risks of deterioration through the influences of heat and humidity have been recognised, while the metal box is apt to become unsightly through damp attacking the metal should the enamel be chipped or scratched in use. For tropical use, therefore, the product is now issued in a watch-shaped bottle, securely corked, waxed, and fitted with a screw cap cover. This is in size and shape convenient for the waistcoat pocket, and securely guards the contents against risk of deterioration.

"FORMITROL" FORMALIN PASTILLES.
(A. WANDER, LTD., 45 COWCROSS STREET, E.C.)

WE have received a specimen of the above product. Each pastille is enclosed in a metallic sheath, which prevents evaporation of the formaldehyde. A neat tin container, suitable for carrying in the pocket is supplied, containing 30 pastilles. Experiment has shown that after slow solution in the mouth of one pastille the saliva contains 0.2 per cent. formaldehyde. An interesting booklet is issued, giving the results of

(a) "Common Disorders and Diseases of Childhood." By George Frederic Still, M.D., F.R.C.P.Lond. Third edition. 8vo., pp. xvi. and 845. Illustrated. London: Henry Frowde, Hodder and Stoughton. 1915.

experiments with gelatin culture media sown with virulent cultures of B. coli, B. diphtheriæ, and other micro-organisms. These support the claim that the product affords a reliable means of treatment in septic conditions of the mouth and throat.

Medical News in Brief.

Royal Society of Medicine, London.

Dr. M. Weinberg, of the Pasteur Institute, Paris, will deliver a lecture on "Bacteriological and Experimental Researches on Gas Gangrene," with epidiascope demonstration, cultures, etc., in the Robert Barnes Hall, on Friday, March 10th, at 5 p.m.

Public Retrenchment.

The final report of the Committee on Retrenchment in Public Expenditure was issued on February 26th. Amongst the recommendations of the Committee are the following:—

The reports of certifying surgeons on accidents in factories should be dispensed with.

A reduced contribution should be prescribed towards the cost of institutional treatment for mentally defective persons except in urgent cases, and a limitation should be fixed on the cost of maintenance in all cases.

The fees paid to medical practitioners for notification of infectious diseases should be reduced.

Children under five should only be admitted to schools in special cases, and grants should not be paid in respect of such children.

The Board of Education should institute an inquiry into the possibility of introducing a normal minimum age of six.

The responsibility for medical work, except in public elementary schools, should be transferred from the Board of Education to the Local Government Board, and the first opportunity should be taken of amalgamating the medical branches of the two Departments.

Arrangements should be made to reduce the number of Health Insurance Commissioners.

A special inquiry should be held into the cost of the Insurance Commissioners' staffs, particularly in the case of the Welsh and Irish Commissions.

Extra-statutory grants to approved societies, etc., outside the principle of insurance, should be closely restricted.

A special inquiry should be undertaken with a view to the simplification of the Insurance Act.

National Insurance in Scotland.

Sir James Leishman, Chairman of the Scottish Insurance Commissioners, attended the annual meeting of the Ancient Order of Free Gardeners' (Scotland) Insured Association, which was held in Edinburgh on February 19th. Reviewing the position of national insurance in Scotland, he remarked that there were more than 1,500,000 insured persons in Scotland. Voluntary insured persons were only 3,000, and judging by members, voluntary insurance in Scotland was a failure. He thought that people should be careful when they made statements about impending bankruptcy, insolvency and that sort of thing. If he were to take Scotland as a whole, up to the present time the insurance fund would be solvent, and would be able to meet its claims.

Welsh Medical School.

At a meeting of the Court of Governors of the University College of South Wales and Monmouthshire, held at Cardiff on February 17th, Principal E. H. Griffiths said it had been a matter of deep regret that the Treasury had thought fit to incorporate this with the question of re-organisation of the University. Sir William James Thomas had not offered £90,000 to re-organise the University. It was the poorest encouragement to similar generosity in the future, and he trusted that the Governors would press in every way on the Treasury the advisability of allowing them to proceed with the school buildings. They had undertaken that no one who could be of use in the forces should be employed on the work, and when no State money was to be employed he did hope the Government would see its way to yield to the unanimous request made by the other three constituent colleges, by the King Edward VII. Hospital, and by the University, and allow them to realise the great gift of Sir Wm. James Thomas without further delay.

King's College Hospital.

The Rev. A. C. Headlam, presiding on February 24th, at the annual meeting of King's College Hospital, said that the normal number of beds was 358. Special arrangements were made by the Committee to enable them to provide upwards of 600 beds for sick and wounded soldiers. The number of beds in daily use was 653, of which 514 were occupied by military patients.

Orthopædic Hospital in Ireland.

The annual meeting of the governors and supporters of the hospital was held last week, Mr. Justice Ross being in the chair.

The report, which was submitted by Miss Agnes French, secretary, stated that during the past year 162 children were under treatment. Of these 52 were discharged, cured; 30 were discharged, improved; one was removed to another hospital; three were discharged as not ready for treatment; only one died; and 75 remained under treatment on the 31st December.

With regard to the income of the hospital, the governors regretted that the subscriptions and donations were £177 8s. 3d. less than last year, and urged upon friends of the charity the necessity of extending the revenue.

Bogus Practitioner.

F. Fisher, of London, was sent to prison at Glasgow on February 23rd for one month, having pleaded guilty to obtaining employment on a Donaldson liner at Newport News by falsely representing himself to be a registered medical practitioner, having previously obtained diplomas and certificates of a man at one time a distinguished graduate of Cambridge University. The graduate's effects had been sold in a London auction room, and Fisher purchased a case which contained some of his documents. Fisher also admitted that he obtained £12 10s. on the liner's arrival in Glasgow, the sum being payable to the registered medical practitioner for the journey as the ship's surgeon. Fortunately there was no illness on board the liner during the voyage.

Summons against a Leeds Medical Specialist.

At the Leeds Police Court, on February 23rd, Thos. Wraight, of Lewis Street, trading as Mr. and Mrs. W. Wood, medical specialists, was summoned to show cause why certain printed matter should not be destroyed.

The Stipendiary Magistrate (Mr. Horace Marshall) held that, however undesirable, the business of the defendant was not illegal, and said that while in the public interest an engraving on the pamphlet in question was not the kind of picture to be exhibited, he could not see his way to convict the defendant in the sense of ordering that the printed matter should be destroyed. He accepted an offer made by the defendant to withdraw the picture, and there would be no order. All the goods and documents seized from the defendant would be returned to him.

Medical Staff of Liverpool Dispensaries.

Some pointed criticisms on the drain which the Army is making on medical staffs of charitable institutions were uttered by Dr. E. W. Hope (Medical Officer of Health) at the annual meeting of the supporters of the Liverpool Dispensaries, held on February 23rd.

Dr. Hope, referring to the reduction of the medical staff of the dispensaries from nine to three, said that an indefinite extension of action of that kind must have the result of frustrating the very objects which the Government had in view. In enjoining economy, the

Treasury exempted two things. One was the efficient method of carrying on the war, and the other was the public health. What was to become of the ordinary population of the city if their general hospitals were turned into wards for soldiers, if the city was denuded of its doctors for military purposes, and if no provision was made for the very section of the population for whom our soldiers were fighting? The question was a difficult one to answer. It was profoundly obvious that there must be a limitation, and that was why a special debt of gratitude was due to those gentlemen forming the committee, officers and medical staff of the Liverpool Dispensaries, who, in their way, were endeavouring to "keep the home fires burning."

Indispensable Medical Officer.

ST. PANCRAS BOROUGH COUNCIL have decided that the services of Dr. Higgins, their medical officer, who is 31 years of age, are indispensable to the health of the borough and they have declined to allow him to join the Royal Army Medical Corps at the request of the military authorities.

Keighley Victoria Hospital.

THE annual meeting of the Keighley Victoria Hospital was held on 21st February. The report for 1915 sated that 747 civilian patients and 61 wounded soldiers had been admitted during the year, and that of the 747 civilian patients 582 were from the borough and 165 from the surrounding districts. During the year 652 operations had been performed. The average daily number of beds occupied was 34, the average period of residence 22 days, and the average cost per day per patient in provisions, 1s. 1d.

Medical Students and Attestation.

INTIMATION has reached the Universities from the Army Council that all medical students in their fourth and fifth years of study and those in their third year of study whose examination takes place during the winter session must either (1) Attest under the group system, or (2) Become liable to the Military Service Act.

London Panel Doctors and Insured.

IN a review of their proceedings during 1915, the Medical Service Sub-Committee of the London Insurance Committee report that they dealt with 103 cases concerning questions which had arisen between insured persons and practitioners on the panel. Of these cases sixteen related to certificates, and with regard to the remainder the allegation in the majority was that the practitioner had been negligent in connection with treatment. It was found that 51, or 49.51 per cent. of such cases had been substantiated.

"Certain of the cases dealt with were of a very serious character, but it may be said that a large number of them were of a somewhat trivial nature, and when it is remembered that the insured population of London consists approximately of 1,500,000 persons, and also that there are about 1,500 medical practitioners on the panel, we consider that the number of cases is extremely low."

In two cases reported on by the sub-committee the Insurance Commissioners decided after enquiry that the names of the practitioners concerned should be removed from the medical list.

Oxford Ophthalmological Congress.

THE Hon. Secretary, Mr. Bernard Cridland, Salisbury House, Wolverhampton, states that the Oxford Ophthalmological Congress will assemble at Keble College, Oxford, on the evening of Wednesday, July 12th next, and the meeting will be held on Thursday, the 13th, and Friday, the 14th July.

Thursday, July 13th, will be devoted to a discussion on "The Relationship of Ophthalmology to General Medicine," to be opened in the morning by Sir William Osler, Bart., and in the afternoon by Sir Anderson Critchett, Bart., C.V.O. The following will also take part:—Mr. P. H. Adams (Oxford), Dr. F. E. Batten (London), Mr. F. Richardson Cross (Clifton, Bristol), Dr. A. G. Gibson (Oxford), Dr. T. S. Good (Littlemore Asylum), Dr. C. O. Hawthorne (London), Dr. Thomas J. Horder (London), Mr. W. H. H. Jessop (London), Dr. George Mackay (Edinburgh), Mr. Leslie Paton (London), Mr. Sydney Stephenson (London), Dr. James Taylor (London), and others.

Friday, July 14th, will be given up to papers, demonstrations and cases.

It is hoped that members will make an effort to contribute to the success of the meeting with cases, specimens, new operations, or novelties of any kind. Such members are requested to notify the Secretary at the earliest opportunity.

More Room for the Wounded.

Sir Arthur Downes, medical inspector of the Local Government Board, is informing London boards of guardians that, in order to reduce the pressure in the infirmaries, and thereby to increase the accommodation for wounded soldiers, the Metropolitan Asylums Board has, at the request of the Local Government Board, arranged to establish further accommodation for sick children. For the purpose two additional institutions will be opened—namely, the Park School, Hanwell, and the Cleveland Street Infirmary, Westminster. The Metropolitan Asylums Board is now fully empowered to receive sick, convalescent, or debilitated children.

War Hospital Burned Down.

THE Grand Hotel at Wimereux, which has been occupied during the war by a British Hospital, was burned down on January 22nd, it is believed as the result of a short circuit. Owing to the coolness and devotion of doctors and nurses the sixty-six patients were safely removed, but the building was gutted.

Economy and Infant Life.

ST. PANCRAS Borough Council having decided not to increase the health visiting staff, the Local Government Board has written pointing out the importance of conserving infant life even at a time when strict economy is required, and deeming the appointment of health visitors a matter of urgency which cannot be deferred.

Hull Tuberculosis Hospital.

THE Hull Corporation Health Committee, on January 24th, decided to sanction the removal of the tuberculosis patients at present in the Infectious Diseases Hospital to the new tuberculosis hospital with as little delay as possible. They also resolved to furnish and equip the new hospital so as to provide accommodation for 25 patients, and to engage the necessary administrative staff, consisting of a matron, a charge nurse, two staff nurses, two probationers, two ward maids, a cook, four maids, and a porter.

Leeds Hospital for Women and Children.

THE annual report of the above institution states that during the year 1,016 in-patients had been admitted, as compared with 1,179 in 1914. New out-patients had totalled 1,566, and the total number treated had been 5,001. The average number of beds occupied had been 64.5, and the average time spent in the hospital had been 16 days. The expenditure amounted to £4,776, as against £4,700 in 1914.

Bradford Royal Infirmary.

THE annual meeting of the Bradford Royal Infirmary was held on 22nd February. The report showed that in the in-patients department there had been 2,873 cases during the year, as compared with 3,059 in 1914, while in the out-patients department there were 4,059 as compared with 5,711. The total ordinary expenditure was £15,834 which was much in excess of the ordinary income, £14,427, and the Board appealed for still greater liberality in order that the work of the hospital might be carried on without any loss of efficiency.

The Woodlands Convalescent Home at Rawdon has during the year been principally used for disabled soldiers. Much needed alterations and improvements

at the home would require £1,500, and the Committee made an urgent appeal for donations.

Royal College of Surgeons.

A meeting of the Council of the Royal College of Surgeons was held on February 10th, with Sir Watson Cheyne, President, occupying the chair, when diplomas of membership were issued to 79 candidates who had passed the required examinations and conformed to the bye-laws. The list contained the names of nine lady students—Miss Isabel F. Buckle, Miss Mary N. Andrews, Miss Helen Ingleby, Miss Ivy Keess, Miss Gladys M. Miall-Smith, Miss May Olivera, Miss Edith M. Paul, Miss Edith A. Shaw, and Miss Elsie Stansfeld.

The following gentlemen were also admitted members:—J. Andrew, G. F. V. Anson, K. L. Bates, T. A. P. Benbow, A. W. C. Bennett, K. H. Bhat, J. T. Bleasdell, E. S. Bowes, A. O. Courtis, D. Crellin, R. G. Dani, L. M. Davies, L. ap I. Davies, H. M. Drake, A. N. Drury, C. Y. Eccles, M. Elias, H. H. Elliot, C. A. L. Evans, D. J. Evans, M. D. Evans, W. J. Evans, C. Gould, H. E. Griffiths, A. B. Gunasekara, C. G. W. Hahr, A. E. Hamlin, W. L. A. Harrison, G. E. Heath, V. R. Hirsch, E. L. Hopkins, V. C. James, J. G. Jones, L. W. Jones, C. E. Kindersley, M. E. A. Latif, H. Lewis, K. T. Limbery, G. A. S. Madgwick, R. H. Maingot, L. A. Malik, F. W. Maunsell, R. D. Moyle, N. R. Nalliah, H. M. Oddy, P. R. O'Rourke Phillips, A. C. Pickett, D. S. Pracy, D. Rees, E. D. Richardson, M. K. Robertson, G. C. Robinson, J. T. Samuel, R. J. Scarr, C. P. Sells, G. B. Sellwood, A. Sunderland, G. T. Symons, H. J. H. Symons, A. H. Taymour, W. H. Thomas, J. A. Tippet, R. S. Topham, H. M. von Mengershausen, H. J. Wallace, H. A. Whyte-Vennables, H. G. E. Williams, A. Wilson, and G. C. N. Younger.

The Council passed a vote of condolence with the relatives of the late Lieut.-Colonel Stanley Boyd, R.A.M.C. (T.F.), who was a member of the Council.

Society of Apothecaries in London.

The diploma of the Society was granted to the following candidates, entitling them to practise Medicine, Surgery and Midwifery:—W. F. R. Castle, L. Kahan, W. J. May, and G. S. Mitchell.

The Royal Society.

The following 15 candidates have been selected by the Council of the Royal Society to be recommended for election into the Society:—

Barton, E. H., Prof.; Bousfield, W. R.; Brown, S. G.; Coker, E. G., Prof.; Henderson, G. G., Prof.; Littlewood, J. E.; McKenzie, A., Prof.; MacWilliam, J. A., Prof.; Maiden, J. H.; Pearson, H. H. W., Prof.; Pollock, J. A., Prof.; Rogers, L., Sir; Shearer, C., Dr.; Thompson, D'A. W., Prof.; Woods, H.

MEDICAL WAR ITEMS.

News has been received of the death in action of Lieut. Bernard Bradley Gough, Royal Army Medical Corps, of Compton Martin, Somerset. He was the son of the late Mr. H. Gough, barrister, Sandcroft, Redhill, and was born at Stockwell, Sept. 14, 1873. Entering Guy's Hospital as student in 1892, he was admitted M.R.C.S. and L.R.C.P. in 1897. He acquired a general practice at Compton Martin, Somerset, and in June, 1915, obtained a commission in the R.A.M.C. Later he was attached to the Royal Garrison Artillery. Mrs. Gough, his widow, who was matron at the Great Grimsby Hospital in 1900, is in command of the Military Hospital at Gourney Court, West Harptree, Somerset.

Major William Henry Odlum, of the Indian Medical Service who has been wounded in Mesopotamia, was born in 1873, received his medical education in Dublin and Meath, and qualified L.R.C.P. and S.I. in 1898. He joined the Royal Army Medical Corps in 1900, and seven years later transferred to the Indian Medical Service, reaching the grade of major in September, 1914. During the South African War he served as a civil surgeon, and at the end of the campaign got the Queen's medal with three clasps and the King's with two.

Lieut.-Colonel Hew Ramsay Duff, of the Canadian Army Medical Corps, who has died on active service in France, was born at Kingston, Ontario, in 1857. Educated at Kingston Grammar School and Queen's University, where he received his M.D. degree in 1884, he had been medical officer for the Quebec Tercentenary Celebrations in 1908 and president of the Army Medical Corps Board of Survey for Ottawa, Colonel Duff served during the South African War, and was awarded the Queen's medal with four clasps.

Lieutenant Francis Sidney Mitchell, M.B., Royal Army Medical Corps, attached Royal Sussex Regiment, 9th Battalion, whose death is announced, was the youngest son of Mr. George Mitchell, of Ardlui, co. Dublin, and was 26 years of age. He took his degree at Dublin University last year.

Captain William Mervyn Biden, M.B., Royal Army Medical Corps, attached to the 2nd Leinster Regiment, who has been wounded in the North of France, took his medical degree in 1910, at Edinburgh University, and before going to the front was in practice at Ketton, Stamford. For some time he was house physician and resident surgeon at the Salford Royal Hospital. Captain Biden got his present rank in the Royal Army Medical Corps a few days after the declaration of war.

Captain H. B. Cunningham, M.B., Royal Army Medical Corps (T.F.), attached Royal Field Artillery, 3rd Northumbrian (County of Durham) Brigade (T.F.), who has been wounded while serving in France, is a well-known Belfast surgeon and a son of the late Surgeon-General John Phillips Cunningham, M.D., of Carrickfergus. At the outbreak of war, Captain Cunningham was in practice in Belfast, and amongst the positions he has held are those of examiner in ophthalmology and otology to the Royal College of Surgeons, Ireland; ophthalmic surgeon to the Ulster Hospital for Women and Children, Belfast; and clinical assistant to the Belfast Ophthalmic Hospital. He formerly held commissions in the London Irish Volunteers, the 6th Battalion Royal Irish Rifles, and the 1st Battalion Royal Irish Fusiliers, from which he passed into the Reserve of Officers in 1903. Captain Cunningham served in the South African War, and holds the Queen's medal with three clasps and the King's medal with two clasps.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

DOCTOR'S BET.

DURING the hearing of a compensation case in the City of London Court, two doctors said a workman had a fractured leg, and two others declared that the leg had not been fractured.

Major Toogood, M.D., R.A.M.C., said he was quite positive about the fracture, and when pressed he offered to bet the doctors on the other side ten guineas that they were wrong. Judge Rentoul, K.C., smilingly said that betting could not be allowed in a court of justice.

TUBERCULIN (Lambeth).—The conclusions of the first report were:—(1) That phthisis is specially prevalent among workers in the boot and shoe industry, as compared with the general population; (2) the individual worker is predisposed to infection by the sedentary nature of his employment, and possibly by the attitude he adopts at his work; (3) the infection is probably (*a*) increased by the number of infective workers, and (*b*) favoured by want of light, the presence of infected dust, and inadequate ventilation in the workrooms.

INFANTILE MORTALITY AT DEWSBURY.

IN his report for December, the Medical Officer of Health for Dewsbury (Dr. T. O. Halliwell) states that the birth-rate was 18.3 and the death-rate 16.6 per thousand of the population. There was an excessively high infantile mortality, the number of deaths of children under twelve months old being fifteen out of the total of seventy-seven deaths at all ages, and two other children died between the ages of one and two years.

THE KAISER'S POPULARITY.

AN Irish recruit is said to have called for "three cheers for the Kaiser." Invited by his angry colonel to explain himself, he said, "Sure, sorr, if it hadn't been for the Kaiser there wouldn't have been any war."

"HOWLERS."

AMONGST the latest "howlers" perpetrated by American school children are mentioned the following:—

A vacuum is a large empty space where the Pope lives.

Pompeii was destroyed by an eruption of saliva from the Vatican.

Typhoid fever may be prevented by fascination.

INTERESTED (Southall).—The birth and infantile mortality rates in Middlesex in 1914—22.8 and 77.2 per 1,000 respectively—were the lowest since 1900. So was the death-rate—10.1 per 1,000.

THE DOGS OF WAR.

IT is officially stated that the "Red Cross Dog League," which began activities early in the war with eight dogs, now has 2,500 in the field, each with its own trainer. It is claimed that the lives of at least 8,000 wounded men have been saved by these dogs.

Meetings of the Societies, Lectures, &c.

THURSDAY, MARCH 2ND.

ROYAL SOCIETY OF MEDICINE (SECTION OF BALNEOLOGY AND CLIMATOLOGY) (1 Wimpole Street, W.).—5.30 p.m.: Paper:—Dr. Clippingdale: The Thames Valley—Certain of its Natural and Medical Attributes. Report of the Committee of the Council. (At 7.15 p.m. the members will dine together at Pagani's Restaurant, Great Portland Street, W., and members may bring guests. Members who wish to dine are requested to send their names to Dr. J. Campbell McClure, 59 Harley Street, W.)

FRIDAY, MARCH 3RD.

ROYAL SOCIETY OF MEDICINE (SECTION OF LARYNGOLOGY) (1 Wimpole Street, W.).—4 p.m.: Specimens will be shown by Sir William Milligan, Mr. Thomas Guthrie, and Dr. Watson-Williams. Cases will also be shown.

ROYAL SOCIETY OF MEDICINE (SECTION OF ANÆSTHETICS) (1 Wimpole Street, W.).—8.30 p.m.: Paper:—Captain G. Marshall, R.A.M.C.: The Choice of Anæsthetics at a Casualty Clearing Station. Demonstrations:—Dr. Harold Low: An Apparatus for the Intra-tracheal Insufflation of Ether. Dr. F. E. Shipway: An Apparatus for the Administration of Warm Anæsthetic Vapours.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital, Hammersmith Road, W.).—8 p.m.: Cases 8.30 p.m.: Paper:—Mr. J. G. Pardoe: Prostatitis, Acute and Chronic.

MONDAY, MARCH 6TH.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—9 p.m.: Third Lettsomian Lecture will be delivered on "The Effects of High Explosives on the Central Nervous System," by Major Fred. W. Mott, M.D.Lond., Hon. LLD.Edin., F.R.S.

Vacancies.

Stockport Union: Stepping Hill Hospital.—Resident Assistant Medical Officer. Salary £300 per annum, together with furnished apartments, rations, etc. Applications to C. F. Johnson, Clerk to the Guardians, Union Offices, Shaw Heath, Stockport.

Salford Poor-law Union Infirmary.—Resident Assistant Medical Officer. Salary £300 per annum, with furnished apartments, attendance, and rations in the Infirmary. Applications to E. H. Inchley, Poor-law Offices, Eccles New Road, Salford.

Leeds Public Dispensary.—Lady Resident Medical Officer. Salary £130 per annum, with board, residence, and laundry. Applications to the Secretary of the Faculty, Public Dispensary, North Street, Leeds.

The Royal Surrey County Hospital, Guildford.—House Surgeon. Salary £150 per annum, with board, residence, and laundry. Applications to the Secretary.

Ingham Infirmary and South Shields and Westoe Dispensary.—House Surgeon. Salary £150 per annum, with residence, board, and washing. Applications to John Potter, Secretary.

Cambridgeshire Asylum, Fulbourn, near Cambridge.—Junior Assistant Medical Officer. Salary £200 per annum, with board, lodging, washing, and attendance. Applications to the Medical Superintendent.

London Fever Hospital, Liverpool Road, N.—Assistant Resident Medical Officer. Salary £200 per annum, with residence and board. Applications to the Secretary.

Royal Victoria and West Hants Hospital, Bournemouth.—House Surgeon. Salary £150 per annum, with board, lodging, and washing. Applications to Gordon M. Saul, Secretary.

The Royal Infirmary, Sunderland.—Lady House Surgeon.—Salary £150 per annum, with board, residence and laundry. Applications to Thomas Robinson, Secretary.

Appointments.

BAKER, Madeleine S., M.D., B.Ch., Assistant School Medical Officer, Acting School Medical Officer to the Bristol Education Committee for the period of the war.

BRADLEY, F., M.B., B.Ch., N.U.I., Certifying Factory Surgeon for the Fintona District, co. Tyrone.

CRONE, J. S., L.R.C.P.Irel., L.S.A., Deputy Coroner for West Middlesex.

LEONARD, T. J., M.D.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Glaslough District of the County of Monaghan.

LOVE, R. J., L.R.C.P. and S.Edin., Certifying Factory Surgeon for the Staplehurst District, co. Kent.

Births.

CHILD.—On February 19th, at Mayfield, Winchester, the wife of Dr. Francis Child, of a daughter.

LEYTON.—On February 20th, at 92, Portland Place, W., to Dr. and Mrs. Leyton—a son.

PARRY PRICE.—On February 21st, at Castle Hill, Reading, the wife (*née* Elsie Bevan) of Hoel Parry Price, Surgeon, Royal Navy, of a son.

TINNE.—On February 22nd, at Oak Cottage, Grassendale, Liverpool, the wife of Dr. P. F. Tinne, of a daughter.

WHITE.—On February 22nd, at West Knoll, Bournemouth, the wife of Edward How White, M.B.Oxon., of a son.

Marriages.

HARNETT—PERIGAL.—On February 23rd, at Holy Trinity Church, New Barnet, W. George Harnett, M.D., R.A.M.C., son of the late Dr. Harnett, of Barnet, and Mrs. Harnett, to Edith de St. Leu, youngest daughter of Dr. and Mrs. Perigal, of New Barnet.

INGRAM—MACTAGGART.—On February 19th, at St. Mary Abbots, Kensington, Percy Cecil Parker Ingram, M.B.Lond., Captain, R.A.M.C. (T.F.), eldest son of Colonel S. D. Ingram, V.D., to Dorothy Fanny Mactaggart, daughter of Edmonds Massey, of the Stock Exchange, and widow of F. D. Mactaggart, of Singapore.

MEYER—STIRLING.—On February 23rd, at St. George's, Hanover Square, W., W. C. B. Meyer, F.R.C.S.E., Captain, R.A.M.C. (S.R.), son of the late Rev. C. Meyer, S.A., to Alice Elizabeth, daughter of Mr. and Mrs. Alexander Stirling, "Morven," Perth.

VICKERS—WILLIAMS.—On February 21st, at St. Nicholas (the Parish) Church, Chiswick, Lieutenant Harold Vickers, M.R.C.S., L.R.C.P., R.A.M.C. (T.), eldest son of Mr. and Mrs. Albert Vickers, of Cape Town and Chiswick, to Ida Rylands Williams, adopted daughter of D. Owen Jones, of Bangor, Carnarvonshire, North Wales.

Deaths.

GOUGH.—On February 16th, in France, Bernard Bradley Gough, Temporary Lieutenant, R.A.M.C., of Compton Martin, Somerset.

HOUGHTON.—On February 17th, in London, suddenly, of heart failure, Arthur Noel Houghton, M.B., Ch.B., M.R.C.S., L.R.C.P., only son of Charles Vince Houghton, of Aukland, New Zealand.

KEOWN.—On February 26th, at 44, Windsor Road, Ealing, W., David Boyd Keown, M.R.C.S., L.R.C.P.Lond., youngest son of the late Lieut.-Col. Henry Keown, 15th Hussars, aged 50.

MITCHELL.—Killed in action in France, on February 15th, Francis Sidney Mitchell, M.B., Lieutenant, R.A.M.C., youngest son of George Mitchell, of Ardlui, Co. Dublin, aged 26.

PATTISON.—On February 22nd, at a nursing home, Peterswald Pattison, Lieutenant, R.A.M.C., younger son of the late Gilchrist Gray Pattison, Edinburgh.

RUTHERFORD JONES.—On February 26th, 1916, at 139 Oakwood Court, Henry John Rutherford Jones, Captain, R.A.M.C., on service, aged 49 years.

STEPHENSON-JELLIE.—On February 21st, at 1, Clifton Road, Weston-super-Mare, Dr. J. Stephenson-Jellie, late of Rocklyn-Llantrissant, Clifton, and of King's Moss, Co. Antrim, aged 74.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, MARCH 8, 1916. No. 10.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravants les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

The Central Medical War Committee.

THE Central Medical War Committee recently issued a circular setting forth its plan for "enrolling all medical men of military age for service, if and when required, in the R.A.M.C. or the medical service of the Royal Navy." The penultimate paragraph of this circular reads as follows: "It is to be specially noted that one great privilege is given to the medical profession that does not apply to any other section of the community—namely, that a medical man can enter the R.A.M.C. on a contract for one year's service, whereas everyone else must join the Services for the duration of the war. *It cannot be assumed, however, that the same privilege will be accorded to those practitioners who fail to enrol with our Committee.*"

Insolence and Vulgarity.

THE passage which I have italicised, astounding as it is, will scarcely surprise the profession which the Central Medical War Committee claims to represent. A more gratuitous, insolent and vulgar threat could scarcely be imagined. Its edified readers will naturally be set a-wondering as to which of the members of the Central War Committee were responsible for the perpetration of such an outrage upon good taste and right feeling. It is signed by the secretaries—Mr. N. Bishop Harman, a prominent member of the B.M.A., and Dr. Alfred Cox, its medical secretary, neither of whom appears to be more than two or three years beyond the military age for the profession. The words of Moses spoken to the children of Gad and the children of Reuben might suitably be addressed to these young gentlemen: "Shall your brethren go to war, and shall ye sit there?"

Who's Who on the Committee.

BUT while we have learnt not to expect from the B.M.A. any evidences either of good taste or delicate feeling, we certainly expect these qualities in some of those who have been moved to unite themselves with the Association for the purposes of the Central War Committee. The full list of this committee is published at the head of the circular in question. It reads as follows:—

Mr. T. Jenner Verrall, LL.D., Bath, Chairman.
Sir William Osler, Bart., F.R.S., Oxford.
Sir T. Clifford Allbutt, K.C.B., F.R.S., Cambridge.
Dr. Frederick Taylor, President Royal College of Physicians, London.
Sir Rickman Godlee, Bart., Ex-President Royal College of Surgeons of England.
Prof. Harvey Littlejohn, Dean of the Faculty of Medicine, University of Edinburgh.
Dr. A. E. Shipley, F.R.S., Master of Christ's College, Cambridge.
Dr. T. W. Shore, Dean of the Medical School of St. Bartholomew's Hospital.
Sir Alex. Ogston, K.C.V.O., LL.D., Aberdeen (President, B.M.A.).
Mr. E. B. Turner, F.R.C.S., London (Chairman of Representative Meetings, B.M.A.).
Dr. J. A. Macdonald, LL.D., Taunton (Chairman of Council, B.M.A.).
Dr. Edwin Rayner, Stockport (Treasurer, B.M.A.).
Lieut.-Col. Sir James Barr, LL.D., Liverpool.
Lieut.-Col. R. A. Bolam, Newcastle-on-Tyne.
Dr. C. Buttar, London.
Major Russell Coombe, Exeter.
Major J. Galloway, London.
Major W. J. Greer, Newport, Mon.
Major Albert Lucas, Birmingham.
Dr. Thomas Hennessy, Joint Hon. Sec. Irish Medical War Committee.
Dr. B. A. Richmond, Secretary, London Panel Committee.

Window Dressing.

NOW it is quite evident that, the chairman apart, the first six names on this list are what on commercial prospectuses are called "front page names." They are there to inspire confidence in the unthinking, and represent ornament rather than strength. Some of these gentlemen may be members of the Association, but if they are, their names appear, not in virtue of that membership, but because of the distinction which they and their offices furnish to this otherwise undistinguished committee. With few, if any, exceptions, the other names represent gentlemen who are prominent and active members of the British Medical Association; the Central Medical War Committee meets at the offices of the Association; it is officered by members and officers of the Association, and issues its circular from 429, Strand, the grotesque statuesque and storied building of the Association.

Really the B.M.A.

It must be clearly understood that, in spite of the presence of the co-opted members and the dignity which their names confer, the Central Medical War Committee is nothing more nor less than a committee of the British Medical Association, and has therefore no claim whatever to represent the profession. The British Medical Association has long since ceased to enjoy a reputation for good taste, good management or diplomatic dealing, and the sooner the military authorities inquire into its mandate and its capacity for organising the war services of the profession, the better for the success of such medical recruiting as is really required. Those authorities should at any rate take note that a repetition of anything in the nature of the senseless and unseemly threat above italicised will be promptly and bitterly resented by everyone to whom it is addressed.

Industrial Compulsion.

If those who were responsible for this Chesterfieldian circular had given a moment's consideration to the state of the law on the subject, they would probably have hesitated before adopting their characteristic "British Medical" tone. For the reply of the resentful malcontent is both forcible and effective. The medical profession has been specifically excluded from the operation of the Act which imposes military service upon certain members of the community; but the Act does not debar a medical man from becoming a combatant. If he should become a combatant he cannot obviously be compelled to act in a medical capacity; for that would be in direct contravention of the pledge concerning industrial compulsion which has been repeatedly given by the Government.

The Attitude of the Profession.

The Committee of the British Medical Association, which is commonly called the Central Medical War Committee, would do well to ponder this point. The profession has proved itself actively patriotic and deeply conscious of its responsibilities in the present crisis; its members are sensitive to suggestion and, up to a point, exceedingly docile to persuasion. But, surprising as it may seem to the British Medical Association, many of them happen to be gentlemen, and gentlemen occasionally decline to be threatened or browbeaten or bullied without showing quite unmistakably that they resent such treatment. More especially are the gentlemen in question likely to resent such treatment at the hands of a self-elected bourgeois body, in whose organising and administrative capacity bitter experience has taught them to put no trust.

Combatants.

And the means of expressing indignation are to hand. Medical men of military age have only to enrol themselves as combatants, to dislocate the scheme which the military authorities at the War Office were foolishly beguiled into entrusting to the heavily mailed Mercuries at the British Medical Association, in the apparent belief that these criers of "havoc" really represented the profession. And, judging from the present tone and temper of the recipients of this strange circular, if there is any repetition of the preposterous threat which it contains, this course will surely be adopted by many. The War Office would be well advised to look into this matter, and before it is too late to insist upon some sweeping changes in the personnel of the Central Medical War Committee. A better plan would be to dissolve the existing body and appoint an entirely new one.

A New Body.

And the expediency of appointing an entirely new body to manage the matter of medical recruiting is more real than may seem apparent. The circular seeks to bustle every medical man of military age into enrolling himself, here and now, with "our Committee." The note struck is one of extreme urgency. But let it be quite clearly understood that there is no urgency of any kind or sort. I have been shown a letter written by one of the four gentlemen who signed the letter to the *Times* (*vide* "Periphery" February 23rd), and who were received in audience by Mr. Tennant, Sir Alfred Keogh being present during the greater part of the time. From this letter it is evident that neither the one nor the other of these responsible and well-informed officials sees any present need for increasing the existing number of officers in the R.A.M.C. The letter further comments upon the fact that the Central Medical War Committee disavows the public statements of Sir Alexander Ogston, a prominent member of their own body, and that, in Mr. Tennant's presence, Sir Alfred Keogh disavows the statements made by the Central Medical War Committee.

Conflicting Voices.

Here, then, is an admirable instance of the compassless and rudderless condition in which the medical man of military age now finds himself. On the one hand we know, on unimpeachable authority, that the Director-General does not want any more medical officers, a fact which, on the face of the numbers already enrolled, must be perfectly obvious to any thinking person. On the other, we hear the shrill hysterical minatory shriek of the Central War Committee, which enjoins upon all and sundry the urgent necessity of immediate attestation. We have Sir Alexander Ogston, the President of the British Medical Association and a member of the Central War Committe, expressing views from which the Committee is in a hurry to dissociate itself. And finally, we have the Director-General declining to countersign the views of the Central War Committee. "Who, then, in this matter is Paul and who is Apollos?"

An Appeal.

Sir Alfred Keogh deserves well of the profession. In circumstances of unexampled stress and difficulty he has steered the army medical ship with a degree of skill and efficiency which has compelled the admiration not only of those at home, but of those abroad. He is only human, but he has performed superhuman work, and has brought to his task the sympathy, tact and urbanity which so often characterise his race. He now owes it to himself and to his department to

shake himself free from this Central Medical War Committee, which, by cunningly confusing itself in the busy and preoccupied eyes of the profession with the medical authorities at the War Office, has succeeded in bringing discredit, unrest, and discomfiture upon the whole organisation of the profession for war purposes. And for their own sakes, and for the sakes of the institutions which they represent, the "distinguished front-page six" should make haste to resign before the Committee, with which they were beguiled into associating themselves, comes by its deserts.

State Medical Service.

And the members of the medical profession, while smiling both at the cajolery and the threats of the impotent and impudent Central War Committee, would do well to consider the meaning of all these strange cross currents. There are not wanting those who see in the proper engineering of the present crisis an opportunity for dishing the medical profession, especially that portion of it which is associated with the Insurance Act. Dr. Welply and his union will do well to keep a sharp look-out on the situation. If panel practitioners can be induced to become members of the R.A.M.C. even for a year, a comparatively clear field will be opened to those who by stealth are seeking to establish a State Medical Service by which the profession would be sweated and the public underserved both in quantity and quality, That there is such a movement on foot there can be no shadow of doubt, and the sooner the panel men combine, and combine to snap their fingers at the British Medical Association and its War Committee, the better will be their chance of frustrating this sinister and dangerously well-organised design. I do not say that the members of the Central Medical War Committee are privy to this movement, but I do say most emphatically that, consciously or unconsciously, they are playing into its hands.

Combine.

For State Medical Service is not only in the building. It is already above ground. Here is a correspondent who writes concerning the Highlands and Islands Medical Service, upon the miserable remuneration of whose medical officers we commented a few weeks back. "None of us are enamoured of the scheme. It is a sort of semi-State medical service, with plenty of compulsion and no pension allowance. They give me £150 per annum to help me to keep a motor car or a motor bicycle, but I have to attend all distant insured people, all crofters and cottars, and all insured dependants, for the following fees:—First visit, 5s.; second visit, 2s. 6d.; medicines extra. I tried to secure that night calls should rank as extras, but this was not granted." And this is undoubtedly the kind of thing with which the profession all over the country will find itself face to face unless the present flank movement upon the panel practitioners first and the whole profession later is recognised and countered. Every doctor who is on the panel in any part of England, Scotland or Wales, should for his own protection immediately communicate with Dr. Welply, of the Panel Medico-Political Union, 47 Fleet Street. Union is wanted; the danger is a real one.

Report on Venereal Disease.

And to strengthen the hands of the advocates of a State Medical Service there is the recently issued report by the Royal Commission on Venereal Disease. A *précis* of that report taken from the *Times* will be found in another column, and the whole report will be the subject of an article at an early date. The only point in connection with it which concerns us at present is the recommendation "that every large local body (county or borough councils) should establish centres, completely equipped for all modern methods where *free* treatment should be available for all sufferers, irrespective of their actually living in the area. The cost of these clinics is to be borne, as to 25 per cent. by local rates, and as to 75 per cent. by Imperial funds." Outside the ordinary profession we have already the Public Health Service, the special service for the fight against tuberculosis, and the service of the Insurance Act. If in addition to these there are to be established a special service for the prevention of infant mortality and a special service for the suppression of venereal disease, the argument for organising the whole profession into various branches of a State service becomes overwhelming.

Organise.

A State Medical Service is not, in principle, by any means necessarily an evil thing; but its details should be a matter of negotiation, on something approaching to equal terms, between the profession and the State. It is only thus that the Profession can save its members from being sweated, and protect the public against insufficient and inefficient attendance. The State is already organised; it has its machinery. The Profession is at present wholly unorganised. It is indeed in a worse plight, for it is disorganised. A few years ago the British Medical Association succeeded in dividing it against itself, and is now clumsily continuing this destructive work. If the Profession does not cast off the shackles of this discredited body and rally to another union with new men and better methods, the powerful enemy which is creeping steadily and stealthily towards it will overwhelm it before it recognises the danger. Organise!

The Moral.

The moral of all this, so far as the immediate present is concerned, is simple enough. A great many medical men of military age, who from financial, domestic, or other sufficient reasons would find it almost impossible to give their whole time to the authorities, have been seriously disturbed in their minds and consciences by the circular of the Central Medical War Committee. They imagine, naturally enough, that this circular represents a call from the Government, and they anxiously ask themselves and their friends what they are to do. The answer is quite plain. What they have to do is to put the circular in the waste paper basket and forget that they have ever received it. If any more circulars come from the same source they should be similarly treated. When Mr. Tennant and Sir Alfred Keogh deem it necessary to ask for more medical men—a very unlikely event—they will doubtless do so in language which is not only unmistakable but unthreatening. Until that time comes, those who have not attested need not attest, and those who have been frightened by threats may sleep peacefully in their beds.

Typhoid Fever.

We publish this week the third and last French clinical lecture on Typhoid Fever, by Prof. Tournade, of Paris, the previous one being by Prof. Rimbaud, of Montpellier. The latter city has during the months of war, owing to the climate of the place and its seclusion gained for it a great popularity amongst the wounded and sick. Next week we hope to publish an article on the important subject of "Blood Pressure in Typhoid," from the pen of Dr. J. D. Rolleston, a Medical Officer to one of our large fever hospitals.

Sinapis.

CURRENT TOPICS.

Anti-Typhoid Vaccination.

THE still verdant subject of anti-typhoid vaccination continues, as of course all our readers know, to be one of very careful observation and unceasing discussion among the members of the army medical staff who have seen service at, or near, the Western front. It still also remains one of which the definite results, and the claims thereon founded, cannot be said to have been finally settled; for the conclusions are, admittedly, not "absolute," while the proofs are chiefly base on the data furnished by the truly terrible "science" of statistics, and the arguments which are displayed in support of the same are invariably found to be spiced with a leavening of the *argumentum ad hominem*. Nevertheless, the broad fact may now be safely admitted that the general results hitherto obtained have been decidedly encouraging—even after all necessary discount and desirable deduction have been duly dealt with in the interest of strict and unprejudiced reasoning. But it should always be borne in mind by the physician that the precise standard value of the degree of immunisation attained, or attainable, by the procedure of "anti"-vaccination cannot yet be definitely calculated by either the most observant of clinicians or the most mathematically skilful of statisticians. And having regard to the practically unlimited number of "variables" that must be taken into account in the integration of the promiscuous item furnished by the clinical data—which are unceasingly influenced by the mobile nature of the individual organism, and that of the type of disease and the influence of environing circumstance—it remains, in the light of our present knowledge, far less than likely that any *calculus* of human invention can ever be made applicable. Under such circumstances, we believe that it is more than merely justifiable to dwell on the emotional aspects of the question. Students of national, as well as those of medical, history will remember that dysentery was known a century ago—and during some centuries before—as "the scourge of retreating armies." Fatigue, bad food, bad water, and mental depression combined to relax the vessels of the splanchnic areas—and the resulting *anxieté épigastrique* which so descriptively presents the most prominent of the early results. The gastro-intestinal congestion matured into (the then unlabelled) typhoid, or dysentery. And the fact that an (at least approximately) efficacious prophylactic has been employed by his medical guardian should always be present to the anxious mind of the weary soldier.

Medical Re-examination.

WE are suffering now from the effects of "rushing" the work of examining recruits. Many, very many, were in the crowds that came at irregular intervals insufficiently examined, with the result that some were passed into the ranks unfit for the work, and others rejected for trivial defects that should not have counted. The former are gradually being eliminated by the surgeons of the various units, who quite frequently have to send weaklings (we ourselves the other day saw a case of osteo-myelitis of the femur) to the nearest hospital for treatment or discharge. I cast no reflection on the recruiting examiners. They did well under overwhelming circumstances.

Now the tribunals are taking up the work of separating the fit from the unfit; but they, rightly enough, assume that the cases brought before them are medically fit; they judge from the social and family entourage of each candidate. A lad with persistent incontinence of urine will have his claims to soldiering speedily settled by his influence on the Schneiderian membrane of his tent or hut-mates.

But in the case of those rejected for trivial conditions—*e.g.*, minute varix in leg and scrotum, beginning hernia, etc., there is need for re-examination. The large leaven of civil surgeons who have gone to the help of the military surgeons have moulded the hard and fast lines that the War Office in its more limited experience had drawn on its, shall we say, semi-educated past.

The Wassermann Reaction in Syphilis.

AT a meeting on January 6th of the New York Academy of Medicine, a discussion took place on the "Serum Diagnosis of Syphilis." Dr. Sydney R. Miller, of Baltimore, spoke as follows:—There can be no argument concerning the nonspecificity of the Wassermann reaction in the Ehrlich sense of the term. There is little danger of our seeing cases of yaws, recurrent fever and frambœsia in this part of the world, and practically the only other disease which has ever given us questionable results has been malaria; but this condition is always easily ruled out by finding the malarial parasites, and in a failure to do this, a course of quinine followed by a second Wassermann, will usually decide a doubtful case. As a result of the experience of five different laboratories, we have come to feel that an unequivocal positive Wassermann reaction, preferably with three, but not less than with two, in a *technique* suitably controlled, in which accuracy of result has not been sacrificed to delicacy of method, is clinically a specific evidence of existing syphilis. Our experience has been by no means unique, in that the Wassermann reaction has cleared up most difficult cases, and in a number of instances has clearly shown the casual or constant ætiologic relationship of syphilis to the diseases under consideration. The point which needs the greatest emphasis, however, is that the closest co-operation must exist between the laboratory worker and the clinicians in the ward. The attempt to divorce one from the other is bound to lead to dangerous misinterpretations. Out of a series of approximately 1,500 Wassermann reaction tests in which the serum or spinal fluid was tested against three different antigens, the results were absolutely parallel in over 97 per cent. of the cases. In seven cases fixation was given alone by the cholesterinised antigen. In all of these a subsequent lumbar puncture revealed the fact that the individual was suffering from some type of syphilis of the central nervous system. This brings up two points which need particular emphasis: 1. A suspected spinal fluid should not be regarded as negative unless it is so when ten times the original volume suggested by Wassermann is used in the reaction. 2. Physicians should demand a report which clearly states against how many antigens and in what amounts a spinal fluid or serum has been tested.

Trinity College, Dublin, and Sir Patrick Dun's Hospital.

THE relations between Trinity College, Dublin, and Sir Patrick Dun's Hospital have recently come under the consideration of the authorities of the two bodies. It appears that some fifty years ago, when it was decided to enlarge the scope of Sir Patrick Dun's Hospital by making it a medico-chirurgical hospital instead of, as it had hitherto been, a purely medical hospital, Trinity College undertook to give some pecuniary assistance. This was given in virtue of the arrangement that the surgical teachers in Trinity College were to be the surgeons to the hospital. The form in which the grant was given was, however, peculiarly unfor-

tunate. It was decided to charge each candidate for the qualifying degrees in medicine and surgery a fee for the *liceat ad eximinandum* of ten pounds instead of the nominal fee previously charged. The fees thus collected were to be handed over to the Governors of Sir Patrick Dun's Hospital. This arrangement has lasted to the present. Recently, however, the point has been raised that it is unfair to many students who do not take advantage of the clinical teaching at Sir Patrick Dun's Hospital to be compelled to contribute to its upkeep. The Board of Trinity College has, too, been anxious to diminish the cost to a student of the medical curriculum, and it has decided to abolish the *liceat* fees. The Governors of Sir Patrick Dun's urge, not unnaturally, that at the opening of the hospital as a surgical institution, the College undertook a responsibility of which it cannot now divest itself, and have asked for a fixed grant in lieu of the fluctuating amount which accrued from the *liceat* fees. This matter is now under the consideration of the Board of Trinity College, and we hope that a satisfactory arrangement may be made. It would be unfortunate if the resources of the hospital, which have already suffered much from the depreciation of its landed property, were to be further injured. The Hospital has performed notable services to medical education and to the sick poor of Ireland, and its usefulness should be preserved and developed. Unfortunately, the settlement of the present difficulty is rendered more difficult by the complicated relations between Trinity College and the Royal College of Physicians—relations which bear directly on Sir Patrick Dun's Hospital. An agreement was arrived at ten years ago between the two Colleges to alter this agreement, but for some reason no steps were taken at the time.

Proposed New School of Dentistry in Dublin.

We understand that the Council of the Royal College of Surgeons in Ireland has in consideration the establishment of a school of dentistry in connection with the School of Surgery already owned by the College. Both Trinity College and University College, Dublin, have schools of dentistry, but the College of Surgeons, although granting licences in dentistry, has not hitherto had a school. The two University schools have confined themselves to theoretical teaching, and students have resorted to the Dental Hospital of Ireland for their clinical and mechanical training. The Dental Hospital has, indeed, been the centre of dental education in Ireland, and it has done much to raise the professional status of the practice of dentistry. We understand, however, that the project in view of the Royal College of Surgeons includes the provision of opportunities of training in clinical and mechanical dentistry—that is to say, the establishment of a dental hospital or clinic. The difficulties in the way of the realisation of such a scheme are great, and require careful consideration before the College commits itself.

Scotch Vital Statistics.

The sixtieth annual report of the Registrar General for Scotland, for the year 1914 contains the following:—

The estimated population of Scotland, which is based on the balance between the observed natural increase and the loss by emigration, is 4,747,167, and, while greater than that of the previous year (1913) by 19,035, is 13,737 less than the population in 1911, as ascertained by the last census.

Births registered numbered 123,934, and, though slightly more than in each of the years 1911, 1912, and 1913, are less than those in other recent years. They are 9,591 fewer than in the year 1903. The birth-rate 26.11, though somewhat higher than in the years 1911, 1912, and 1913, is lower than in all other previous years. The births of illegitimate children are more than in the year 1913, but are less than the average during recent years. They numbered 8,879. The illegitimate rate 7.16 per cent. of the total births, is higher than in the previous year, but less than the mean of the rates of the preceding five years, and is greater than that of the preceding ten years.

The marriages registered number 35,049, which is more than in all previous years. The marriage rate was high. It was 7.38, and is higher than those of all previous years with the exception of 1865, 1872 to 1876, 1898, and 1899.

Deaths registered number 73,557, which is 488 more than in the preceding year, but is less than the average during recent years. The death-rate of the year was 15.49, and is higher than those of all years since 1909, but less than those of all other years. The infantile mortality rate was 110.6 per 1,000 registered births. It is more than that of the year 1913, but less than the average during recent years. Among causes of death of greater than average frequency were scarlet fever and diphtheria.

The Crichton Institution for Mental Diseases.

Dr. Easterbrook, Physician Superintendent of Crichton Royal Institution, Dumfries, in his report for 1915 states that the private patients, certificated and voluntary, numbered 585 at the commencement, and 550 at the close of the year, or a decrease of 35. The rate-aided patients numbered 400 on January 1st, and 392 on December 31st, or a decrease of 8. The admissions numbered 203 (90 men and 113 women), this figure being 42 below the exceptionally high number (245) of admissions in 1914, but 10 above the average (193) for the previous six years.

Comparing the figures for 1914 and 1915, there was a decrease of 42 in the admissions of 1915. But as the admission rate was unusually high in 1914, the year of outbreak of the great war, and as the admission rate of 1915 was above the average for the six years preceding 1914, the Medical Superintendent does not feel justified in drawing conclusions as to any special connection between an apparent but not real lowering of the admission rate of 1915 and the influence of the war. Many mental hospitals in the country report a lowering of their admission rates since the onset of the war, but this has not been the experience of the institution, at which the admission rate has been higher than the average for several years previous.

An analysis of the histories of the 130 receptions showed that, in addition to the possession of an unstable nervous system, inherited or acquired, the principal exciting causes of the mental illnesses included:—Worry and anxiety and allied psychical factors, 25 per cent.

Lord Knutsford, better known as Mr. Sydney Holland, chairman of the London Hospital, has met with a serious motor accident, sustaining head injury and general bruising. He is reported to be progressing favourably.

At a meeting of the Market Harborough Guardians on February 25th, the Clerk said their medical officer (Dr. Thomas) had already gone, and out of seven medical officers employed by that Board, five had already joined. He thought their Board had done all it could to spare their medical men.

FRENCH CLINICAL LECTURE

ON

SUBJECTS OF ANTI-TYPHOID VACCINATION; TYPHOID FEVER OCCURRING IN THE ANTI-TYPHOID VACCINATED.

By M. ANDRE TOURNADE,

Medicin-Major, Professeur Agrege of the Faculties of Medicine, Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

THE series of cases of typhoid fever which I am now about to discuss have been observed by my *confrères* and myself in the No. 13 Hospital at Verdun in the period ranging from December 1st, 1914, to February 15th, 1915. The items of the complete series are classified in the subjoined table, which also presents a summary of the most important features and results :—

	Number of Inoculations.			Total.
	2	3	4	
Total number of cases observed	76	36	30	142
Number of cases received during the three-week period after inoculation	21	4	1	26
Number of deaths ...	6	4	0	10

Mortality : 7.04 per cent.

I now hasten to indicate to the reader how the results thus tabulated lend themselves to instructive discussion, but I will just point out at once that even the criticisms which they may elicit, and which may be based on the presentation of facts here offered, must inevitably tend to the more precise definition of the conditions which should always be required in the preparation of corresponding documents; before final estimation of the degree of credit that may justly be accorded to the arrangement of the perspective, and the assumed reliability of the conclusions.

The diagnosis in every one of the vaccinated cases here referred to has been purely clinical—*not bacteriological*—and, in virtue of that very fact, it, wrongly indeed, confounds under the same rule of conduct with typhoid fever properly so-called—affections specifically distinct, and against which typho-vaccination presents no immunising influence whatever. So far, indeed, as we may be permitted to draw conclusions from analogy of clinical facts and features, the greater number of those patients were infected by the Bacillus paratyphosus B, or other germs of even less importance; only a minority by the Eberth bacillus. Anyway, this conclusion arises from the results of the researches carried out in the various laboratories of the first army, and in connection with subjects of the same rank; and it is in the same sense that the results of the investigations made by MM. Lippman and Penan at the Hospital No. 13, since February 20th, 1915, must be admitted to plead on their own behalf.

There can be no doubt of the clinical fact that the great majority of the vaccinated patients, who had apparently contracted typhoid fever, were in reality suffering from paratyphoid; the proportion being about 75 per cent. But, at the same time, it cannot any longer be disputed that 25 per cent. of the vaccinated cases did actually present the authentic Eberthian infection. Are we accordingly to conclude—as do certain physicians who are mentally devoted to final solutions of the most simplified type—that anti-typhoid vaccination has really failed to fufil the promises made in its behalf?

Before pronouncing a definite answer to this important query, we should carefully pass once more through the critical filter the observed facts of every individual case in which the Eberthian infection has been authenticated, and thoroughly examine the record of the conditions under which the inoculation had been carried out in each instance. Let us then ask the question every time: Does this case present a satisfactory record of the fulfilment of all the requisite conditions?

Now, on proceeding to carry out this inquiry, we soon come to ascertain the fact that a certain proportion of the total number of vaccinations have necessarily proved powerless as regards the conferring of the desired immunity, for the plain reason that they had been carried out on *subjects already infected*—that is to say, during a period of more or less latent incubation. The reality of this very important fact is established by double proof : First, the unquestionable record of the lapse of an interval of less than three weeks between the date of the vaccination and that of the onset of the first symptoms of the fever. Second, the frequency of abnormal temperatures occurring among the soldiers who had just returned from the trenches and then presented themselves for anti-typhoid vaccination. On the dates November 5th and 9th, 1914, I had the rectal temperature taken in a series of 749 soldiers before injecting them with anti-typhoid vaccine, after deciding with myself to adjourn the procedure in all the cases which should present a temperature above 38° (100.4° F.). Now, no less than 67 of the total number of that series of cases were found to present this abnormal thermometric condition. They were thus classified :—

34 presented a temperature ranging between 38° (100.4° F.) and 38.4° (101.12° F); 17 between 38.5° (101.3° F.) and 38.9° (102° F.); 9 between 39° (102.2° F.) and 39.4° (103° F.); 7 between 39.5° (103.1° F.) and 40° (104° F.), and upwards.

Now, it is absolutely certain that without the physical proof supplied by the evidence of the thermometric test, those men would all have been regarded as of normal condition, and accordingly registered as duly inoculated. They would also have presented in every instance a strongly pronounced febrile reaction, of which the vaccine would have been wrongly obliged to bear the whole responsibility. But there is even more significant evidence of fact still to be revealed. During the days next following, 16 of that series of 67 men had fallen ill, and *eight of the cases proved to be typhoid fever.* If the vaccination had been carried out on the members of this last group, it surely could have played but a doubtful part in antagonising an infection already realised, and would inevitably have been once more marked down as a failure—under most fallacious evidence.

Thus we have succeeded in eliminating from the record of the procedure those cases in which the vaccination seemed to have proved inefficacious simply because it has been carried out too late, and was accordingly unable, as sometimes occurs in the

practice of anti-rabic immunisation, to outrun the velocity of the previous infection; indeed, after evidence of the latter had been attained, the practice of vaccination should, according to our principal physician, M. H. Vincent, be absolutely forbidden.

But we should not, on the other hand, even with the fullest impartiality, ever take into serious consideration the records of cases of failure to establish immunity which were merely due to the adoption of a procedure carried out with a wholly irregular *technique;* insufficient number of injections; too long an interval between the successive punctures; employment of vaccine of inferior quality, or spoilt by long keeping; etc. Not one of those factors must be regarded as negligible, and they have many times intervened in the inevitably precarious conditions under which the procedures of attempted immunisation have been carried out among our soldiers at the front; where the vaccination had to be hurriedly performed in the interval between two sojournings in the trench, or between two successive assaults.

And if there still subsists, after all those legitimate and necessary eliminations, an indisputable record of the occurrence of some cases of genuine Eberthian infection occurring in subjects who had been vaccinated with all the precautionary details of apparently rigid orthodox practice, what conclusion must necessarily be drawn from this statistical fact? The true reply evidently is that the degree of protection which is conferred on the subject of typho-vaccination is not absolute, not a prognostic item of mathematical certitude, any more than is that of the immunisation—which is nevertheless unquestionable—conferred by a first attack of typhoid fever.

Finally, I would here add, in accordance with the evidence offered by the collective experience furnished by the results of my personal observations, that if the procedure of anti-typhoid vaccination does not absolutely secure preservation from all future attack, there is still a degree of advantage, when one is attacked by the typhoid infection, in having been previously vaccinated. For, in the great majority of those so treated, the disease passes through a benign course, and the recorded mortality is but 7 per cent.; which surely offers a convincing contrast to the 14 per cent. mortality of the cases occurring among the non-vaccinated; while, in addition to these statistical facts, it should be permanently remembered that the items of that record of reduced mortality are drawn only from the list of those patients who had been inoculated but two or three times; not a single one of those who had received the full number of four inoculations has, so far as we have had an opportunity of ascertaining, succumbed to a subsequent attack of typhoid fever.

Mr. Arnold Morley, M.P. (Liberal) for Nottingham 1880-5 and the Eastern Division 1885-95, Patronage Secretary to the Treasury 1886 and Postmaster-General 1892-5, son of the late Samuel Morley, M.P., left £2,500 each to the General Hospital, Nottingham, the Convalescent Homes Association, Nottingham; and the Children's Hospital, Nottingham; £1,000 to the Women's Hospital, Nottingham and £500 to the Anglo-American Hospital, Cairo. He also bequeathed £1,000 to David Morgan Beddoe, F.R.C.S., of Cairo, "who does so much for the people among whom he lives and works."

Dr. Aylmer May, who was principal Medical Officer to the Forces in Northern Rhodesia, is to act as assistant in France to Colonel Sir Almroth Wright

ORIGINAL PAPERS.

THE TREATMENT OF GUNSHOT WOUNDS.*

By SIR BERKELEY MOYNIHAN, F.R.C.S.,
Professor of Clinical Surgery in the University of Leeds.

Sir Berkeley Moynihan, F.R.C.S., in introducing the subject, said the problem of the treatment of gunshot wounds was one which had been profoundly altered, if indeed it had not been radically modified, by the experience derived during the present campaign. The new and unexpected features were dependent upon a set of circumstances each one of them different in kind from anything which surgeons had known before. The character of the bullet in respect to its mode of flight, its velocity, the damage it inflicted on the parts, the quality of the infection derived either from the earth or from the patient's clothing, was far more virulent than anything which surgeons in the present generation had had any experience of. And, in the earlier stages of the war at least, the conditions of the patient, in respect of fatigue and anguish, were such that he fell a very easy victim to the bacterial onslaught, which was one of great ferocity. In the early literature of the war, a good deal was said in regard to failures—failure of the antiseptic system, failure of the aseptic system—and on the upheaval which threatened the position which Lister had held in all minds; all those things were spoken of with a certain amount of acrimony. One of the earliest tasks which he set himself on returning from France was to once again go over Lister's papers, to see how he had met the concrete problems with which he was faced fifty years ago. Lister, of course, stood in need of no defence to-day; and even if he did, the best defence was to be found in those papers just mentioned The new set of circumstances had reference partly to the flight of the bullet. The bullet had several different movements: a forward movement, a rotation round its longitudinal axis, and a curious movement, which the French called a *mouvement de bascule,* which, he was told, those standing behind a shell in its flight could see. The apex of the bullet travelled steadily, while the base twisted round in a circle of gradually diminishing extent until it came to an end at about 800 yards. The soil on which the campaign was still being fought was some of the most highly cultivated in the world; for generations it had been heavily manured, and therefore contained the organisms one would expect to find in tæcal matter from horses, cattle, pigs and poultry.

In such a discussion as this, one must remember the quality of the wound inflicted, and the kind of bacterial implantation in the surface wound. When a bullet struck soft tissues, it was probably arrested at its tip sufficiently to allow the base—heavier and with a greater momentum therefore—to catch up with the apex, so that a rolling action of the bullet ensued, giving an explosive effect. The muscles torn retracted with unequal strength, resulting in little recesses and cavities being formed in the wound. Hence little lakes of serum were shut off completely, and if the implantation of bacteria had occurred there, a very prolific growth of them took place. The projectile imparted some of its terrific velocity and force to substances which it struck, so that portions of bone which received the impact themselves became in a sense projectiles which were hurled into the surrounding tissues. The sodden clothes of the soldier who had been on such rich soil carried microbes, and portions of

* Paper opening the discussion of the subject at a meeting of the Harveian Society of London, February 24th, 1916.

clothing carried in by the bullet impregnated the wound with those organisms. In treating such wounds, the petty little methods in use for civil cases before the war were utterly inadequate. In pre-war days, it was common to apply tincture of iodine or carbolic acid to the wound; but so little effect was produced by them in these patients that by the time they reached the base hospital it was impossible for the surgeon there to say what application, if any, had been made to the wound at the field ambulance or clearing-stations.

The question of gunshot wounds should be approached from two points of view. The first was the preventive treatment of infection of wounds, *i.e.*, the prevention or control of infections at the earliest possible moment after the infliction of the wound. The second was the abolition, or reduction, of an infection which had already been set going. Before considering those aspects, however, there were certain preliminary matters which it was well to clear out of the way.

First, with regard to the excision of gunshot wounds. This, of course, was the ideal method. If an infected wound could be excised, so that only clean raw surfaces were left, which it was safe to bring together by suture, then the wound would heal by first intention; it was the kind of wound which the surgeon made deliberately at an operation. But in the circumstances prevailing, it was impossible to think of being able to do this in most cases, though it had been done in the case of many penetrating wounds of the knee joint, of the scalp, and of the abdomen. It was a method which Colonel Gray, now at Rouen, had practised in many cases, and that surgeon placed much reliance on it.

He next wished to insist that all wounds, wherever they occurred, must be treated with a certain ritual. The skin must be cleaned, loose fragments of clothing, coins which had been carried in from the pocket, fragments of bullet, bits of leather, should be taken out at the earliest possible moment, and efficient drainage should be established. He believed that too little regard was paid to the adequate preparation of the skin. The favourite method of preparing the skin around a gunshot wound was to paint it with iodine. He had seen tincture of iodine painted over dung and dry earth—rather imperfectly painted, as a rule—and an operation carried out on the parts in the firm belief that something effective had really been done to secure sterilisation of the skin. To sterilise skin was always a difficult matter; to keep skin sterile for half an hour was an almost impossible matter. And one of the most ineffective methods of preparing the skin for operation or when a gunshot wound was to be treated was the painting of it with any form of iodine, of any strength, with any degree of frequency, and under any circumstances whatever; and he wished to denounce as strongly as he could the use of iodine for the purpose of applying it to the skin in surgery; it was an entirely ineffective and futile method. The worst of it was that it bred a certain kind of superiority in the mind of the surgeon. A surgeon who could lightly perform an act which he believed to be of value was apt to think that other acts could be performed easily during the course of the operation. It was a very difficult thing indeed to do any surgical operation perfectly, so far as the *technique* was concerned. Never for an instant was a surgeon entitled to relax his supervision of every detail relative to the antiseptic *technique* of an operation. And if by the application of an insufficiently effective substance like iodine to the skin he thought he had done something which was of value in the ritual, it was apt to affect his whole attitude towards the future stages of the operation. The skin, therefore, in cases of gunshot wounds should be first cleaned. And it was well to have it cleaned with something which was easily available. There was always plenty of petrol about, and that was useful for the purpose of getting the skin socially clean. Surgical cleanliness was brought about by the use of an antiseptic. The best was one which ought to be easily accessible, namely, Dakin's solution.

The third point to which he wished to refer was immobilisation of the wounds. That was a point which he felt sure was very ill-considered in the majority of cases. If a patient received a fracture, whether of the arm or of the leg, in many cases at least some apparatus for immobilisation was applied. It was equally important in cases of severe wounds of soft parts. The absence of motion in a limb which had suffered a severe injury increased the comfort of the patient, and considerably diminished the risk of the extension of the infection throughout the wound.

He now came to the question of the treatment of the gunshot wound under the two headings he had indicated. The first was the control of infection from the earliest possible moment. That might be called the abortive treatment of infection received in a gunshot wound at the time of its infliction. In the earlier stages of the war, as he had already said, carbolic acid and tincture of iodine, and various other substances, were used, in the hope of producing some sort of sterility in gravely infected wounds. Those measures, as many knew, were utterly inefficient. The reason was that our standard of antiseptics was quite different from what it was supposed to be. For years, ever since Lister found that at Carlisle they were using a crude form of carbolic acid to disinfect sewage, it had been the standard of an antiseptic for the surgeon. The surgeon had been in the habit of speaking of pure carbolic as something all-powerful, capable of controlling or annihilating the infection produced by any organism. As a matter of fact, pure phenol was an extremely feeble antiseptic compared with some antiseptics now in use. Therefore when blaming carbolic acid, it was well to remember that the surgeon was now being faced with problems arising out of the war quite different from those which had been confronted in civil practice, in which very grave infections had been, for years, almost unknown. The antiseptics which he thought of value were the hyperchlorite solution, named "Dakin's solution," which was made, first of all, in the University of Leeds, of which Dr. Dakin was an old student. He was sent over from the Rockefeller Institute, where he was with Alexis Carrel, to carry out researches in the French hospitals. He (the speaker) met him within a day or two of his coming to Europe, and heard his views with regard to the chance of the discovery of an antiseptic of better value. It was not long before they began to make, under his formula, "Solution 30," which was Dakin's solution. This possessed a bactericidal value far greater than that of carbolic acid. It was of no use to test the power of antiseptics in ordinary watery solutions. It must be tested in the presence of either serum or pus. Tested in the presence of serum, Dakin's solution had a bactericidal value about thirty times as great as pure carbolic. A commencement was made with Dakin's solution very early, and he (Sir Berkeley) had made a good many investigations in regard to it from the clinical standpoint, and also some from the bacteriological, during the last few months. Dakin's solution was very cheap, easily made, and was very

diffusible throughout the wound. It possessed a really remarkable power of clearing away dirty sloughs from a wound. But the solution needed to be applied in the proper manner. Surgeons had been brought up on the idea that the ideal surgical dressing consisted of some gauze, a certain amount of wool, and a bandage. When that kind of dressing was applied to the ordinary gunshot wound of war, one saw, on taking it away, a thick layer of pus, even an hour or two after applying it, on the surface of the dressing. What had been done, in applying that so-called antiseptic dressing, was to poultice the wound with pus. Obviously, that was not the best way of dealing with a wound, and Dakin's solution must not be so applied. The wound should be packed rather loosely with gauze, which could be frequently made wet by the application of fresh quantities of the solution. The various ways of doing that were simple. One of the ways, introduced by Carrel, was to have tubes of small size, in which were many perforations, wrapped round with Turkey towelling. These were pushed into the furthest recesses of the wound, and into them some of the solution was injected. It diffused itself throughout the wound, penetrating to the deepest recesses. Another method was to have strings dependent from the wound, which strings sucked up the liquid, whence it was conducted similarly to all parts of the wound. The best plan, he thought, where the wound was in a situation which allowed of it, was to have a loose packing of gauze and to send a nurse round every hour armed with a Florence flask charged with the solution, from which she replenished the cases with the solution. Underneath the limb was placed a photographic dish for the reception of the excess fluid and the discharges from the wound. Dakin's solution must be used fresh, not more than five days old; and it must not be heated before use. It was a little apt to irritate, and that irritation seemed greater in some parts of the world than in others. Dakin suggested that it was probably because the bleaching powder from which the solution was made was of different quality in these various places. He (the speaker) thought also that as it had such tremendous chemical power some interaction occurred, especially if other antiseptics had previously been used in the case, and irritable products ensued. In view of this, it was advisable in all cases to protect the skin. The great point was never to apply the ordinary civil dressings which were customary before the war.

Dr. Dakin had now made a newer antiseptic, which he called "chloramine." That was, approximately, five times as strong as the hyperchlorite—in other words, 150 times as strong as pure carbolic acid, tested in conjunction with serum and pus. It was an extremely diffusible substance, and it had been a little difficult to find the best way of utilising it. He thought, however, that the right method had now been found. It was suspended in gauze, and this gauze, when packed lightly into a wound, diffused this very strong antiseptic steadily throughout the wound. It had only been in use for three or four months, but so far the results showed that it was an exceedingly powerful antiseptic, much stronger than anything which had been used by them before, and its power of cleaning a wound was greater. Unfortunately, there had been some difficulty in getting it, because the necessary substances were not easily obtained; but recently two or three tons had been procured, and he therefore hoped it would be generally obtainable. He had just heard that the name of it would have to be changed to Tolamine, because twenty or more years ago a patent-medicine vendor in America gave the same name to a cough mixture.

The treatment of a gunshot wound, therefore, immediately after its infliction should be treatment directed to the abortion of the infection by the application, at the earliest possible moment, of the strongest antiseptic obtainable.

The question here arose as to whether Wright's method of hypertonic saline was of any value in the early stages after the infliction of such a wound. Just a year ago he (the speaker) was with Sir Anthony Bowlby at the front, and he saw a very great number of patients brought into field ambulances and stations, and he could vouch for the perfect accuracy of Sir Anthony's description of the men so brought in: they were weary beyond endurance, and the moment they were brought in they fell asleep, and it became difficult to rouse them, either to take beef tea or to smoke the inevitable cigarette. They were cold, and often they had poor, feeble pulses, and they looked very pale. If at this stage Wright's method was applied, depending as it did on causing a profuse outflow of serum, it was quite certain that wounds inflicted upon people of this kind could not be compelled at first to discharge serum. The blood-pressure must be very low, the pulse flickering, and it would be found almost impossible to arouse a flow of serum from such a patient. Even if it could be done, he thought it would be the worst thing for a patient in that state, from the point of view of his general condition. Taking into account the general principles he had mentioned, he thought the best thing which could be done was to apply as soon as possible the strongest procurable antiseptic, in a form which permitted of free diffusion throughout the wound, though not too rapidly. He did not think the task of disinfecting wounds from the beginning ought to be very difficult, because the work of Alexis Carrel had shown that when smears were taken from these wounds within half an hour of their infliction, it might be necessary to search through several smears before finding organisms. It was only because the organisms were very virulent, or the nutrient medium most suitable, that the cases showed such rampant processes of putrefaction. Carrel's work seemed to show that there should be no difficulty in aborting an infection if adequate means were taken early.

The next question to be considered concerned the treatment of infections when such had been thoroughly set going in a wound. In most of the cases of wounds such as were seen in England, where suppuration was already ablaze, and when all possibility of prevention was passed, the question became one of deciding what was the best method of controlling, and eventually removing, the infection. This seemed to him the right stage of the discussion to touch on Sir Almroth Wright's hypertonic saline method.

The principle which Wright asserted was that by the application of very strong saline solution to the surface of a wound there was caused an outflow of large quantities of serum, this serum having bactericidal properties, so that organisms in the wound were attacked and destroyed. There was no doubt that, properly applied, Wright's method produced an extremely copious outflow from the wound. So great, indeed, was the drainage from an extensive wound that patients complained seriously of thirst, and consumed large quantities of water. If such drainage occurred early after the receipt of the injury, he thought it undesirable to apply it, from the standpoint of the patient's general condition. Wright's solution certainly cleaned a wound, gravely infected with organisms and producing pus in large quantities, quicker than did any other application; the granulations then began to glow with health, and a condition was produced in the wound such as he thought Solomon must have

had in his mind when he said, "The blueness of a wound cleanseth away evil" (Prov. xx., 30). There were certain disadvantages in Wrights method. If the application were too long continued, there was a tendency for the granulations to bleed and become œdematous. And Wright's method, tested bacteriologically, was ineffective to kill the streptococcus, which was the hardiest and tardiest of all the wound organisms. In the case of wounds in France, however freely they suppurated, they rarely found the streptococcus present. At the end of three or four days after the application of Wright's method, all the organisms had gone with the exception of the streptococcus; and that was one grave objection, that however carefully the method was applied, there was no power in it to kill the streptococcus. When the bleeding of granulations occurred, it was better to stop the method and apply something else. Wherever possible, the edges of the wound should then be drawn together, by sutures or plaster, and then even the most unlikely-looking wound would sometimes heal up rapidly. A variant of Wright's method had been introduced by Colonel Lawson. Instead of putting the gauze on and constantly saturating it from a Florence flask, he used a gauze wick in which tabloids of saline were wrapped. It was only a different method of application. He had used it himself, and he found that the patients complained of burning and smarting; therefore he had tabloids made with chloraltone, and with this analgesic the patients seemed to be more comfortable.

Another method which he had seen tried was that introduced by A. E. Morison, of Newcastle, namely, sulphate of magnesium with glycerine. He could bear witness that the claim made by Morison for this method was a just one. The wounds so treated were vivid with health; and the great advantage possessed by this method was that the streptococcus was killed often by the fifth day.

The method of treating a heavily infected wound with antiseptics was utterly futile before this war. They were syringed out with some sort of lotion, and a dressing was put on. That was ineffective, and such measures were ridiculously ineffective in the case of these campaign wounds. But treatment on the lines already mentioned with Dakin's solution, or with chloramine, quickly brought health back to the wound. On the whole, he had a preferential regard for Wright's method in all cases of profusely suppurating wounds, such as were seen in England, especially in the earlier stages.

One matter which was of great advantage in the treatment of gunshot wounds was getting the patient into the open air. Three or four days ago he was inspecting the hospitals at Sheffield, which would scarcely be called a health resort. He found sixteen patients in a row, who had been out of doors day and night, and they were cases of most grave infection. He gave them every opportunity of saying they were miserable and would be happier inside, but they said they were comfortable and would not go inside if they could avoid it. In France, Major Adye-Curran had compelled him to believe that it was a great advantage to patients suffering from heavy infection to have them out of doors, and wherever possible, to have the wounds exposed to air and sun. And in the retreat from Mons, where the worst cases came from, he took off the dressings from the very bad wounds, and exposed them to the sun. When it seemed that the patient must die, owing to the severity of his infection, a remarkable change came over him when he was exposed to sun and air, the latter even all night, even in a rigorous climate. Under such circumstances patients ate better—if that were possible—slept better, and altogether enjoyed themselves more than when kept in the ward. In deciding whether to take a patient who was very septic into the open air, no regard need be paid to his temperature chart. The value of such exposure to the air he learned many years ago at the Johns Hopkins Hospital; it was one of the many things the profession owed to Halstead.

With regard to vaccines, he spoke of them with hesitation in this connection. The differences of opinion among physicians with regard to this matter were such that one felt timorous about even mentioning the subject publicly. The disparity of view was possibly traceable to the opinions not having been based on similar events. He felt, however, that surgeons had not given vaccines quite a fair trial. Tuffier, of Paris, one of the greatest of living surgeons, expressed the opinion—with all a Frenchman's elegance and a Scotsman's confidence,—that vaccines were not of the slightest use in surgical cases. Were vaccines of value when used as prophylactic agents? If the hypothesis which Wright had expounded were true with regard to the action of vaccines, that they did something to fortify the power of the serum against organisms with which it had to fight, then Wright's vaccine treatment and Wright's hypertonic salt solution treatment would seem to be reasonable as methods of dealing with wounds. So far as prophylaxis was concerned, he did not know that the method had been put into practice. Sir Watson Cheyne suggested, in a paper in the *British Journal of Surgery*, that bacteriologists might now well be employed in trying to raise the defensive power against organisms encountered in this war in the case of all the new recruits. However, the fact remained that the great scientific triumph of this war was that which Sir Almroth Wright had won in connection with typhoid vaccines; and if there was hope of even remotely approaching that, a very thorough trial should be given to preparation by vaccines of soldiers who were to fight in this war.

NOTES ON

TWO CASES OF ANEURYSM DUE TO BULLET WOUNDS.*

By C. ARTHUR BALL, M.D., F.R.C.S.I.,
Surgeon to Sir Patrick Dun's Hospital.

LIEUTENANT F. T. was admitted to King George V. Hospital with an aneurysm of the femoral artery. He gave the following history:—"I was wounded on April 25th at St. Julien. When firing a machine gun a bullet hit the gun, the bullet was smashed to pieces, and the pieces were deflected downwards into my legs and right elbow. Five or six pieces were afterwards picked out with forceps, having lodged just under the skin. Two large pieces entered my right thigh, and remain there still. After being hit I walked away about thirty yards and asked a man to bandage my leg. I must have lost consciousness, as I do not remember the man finishing the dressing. After a time an officer came to see me and tied something tightly round my thigh. Was carried to a dressing station about two hours after being hit, and went from there to Poperinghe Hospital an hour or so later. Felt very weak and thirsty; was given an enema saline, I think. Felt better next morning, went by train to Boulogne on April 26th; crossed to England on April 27th, and went to hospital in London. Wounds healed cleanly. After about 12 or 14 days I noticed a pulsation over one of the wounds, and pointed it out to my nurse, who said it was the femoral pulse. From the way she spoke I thought it was nothing out of the ordinary, so did not bother any more about it. Had a slight rise of temperature, about

* Read before the Section of Surgery in the Royal Academy of Medicine in Ireland, on Friday, December 3rd, 1915.

100° every evening, for about twelve days after being hit. Left hospital and went on leave about May 19th. Felt no pain in leg except an occasional twitch. Noticing that the pulsation still went on, and that the swelling got very slightly larger. I did not take any very violent exercise during my leave, nor do a very long walk. Appeared before a medical board on July 10th, admitted to hospital July 12th."

On Examination.—A pulsating swelling about the size of a bantam's egg was present over the centre of right thigh, just over the femoral vessel at the site of one of the wounds. Pressure on the femoral at the brim of the pelvis stopped the pulsation, and the swelling rapidly diminished in size. It appeared as if the aneurysm was quite superficial and only just under the scar. There was no pulsation in the veins of the leg. X-ray examination showed two small pieces of metal in the thigh, one just at site of aneurysm. As the swelling was increasing in size and felt as if it might readily burst through the scar, operation was advised.

Operation.—An incision was made over the femoral vessel above the pulsating scar, the superficial femoral was exposed, and a Crile's clamp applied so as to control the vessel. The incision was then prolonged downwards past the aneurysm, and the artery exposed below, another Crile's clamp was used to control the artery here. The anterior part of the sac was then dissected free, and it was found that the sartorius muscle completely covered the sac (so that the apparent very superficial feel of the aneurysm was more apparent than real). The sac was isolated as much as possible, with the view of ascertaining if the hole in the artery could be sewn up, as in Matas' operation. Some laminated clot was removed, and it was found that the sac extended as far to the posterior as to the arterior side. Some slight bleeding of bright colour came from the sac in spite of the main vessel being secured above and below. As the entire artery was involved there was no question of suturing the hole in the vessel. The question of excision of the sac was then considered, but it was thought inadvisable, as the sac was so adherent that it would have meant injuring the vein. The lower opening of the artery into the sac could not be made out. The artery was then tied with a double ligature of chromic catgut above the sac and below, owing to the slight bleeding the sac was sutured up and the wound closed. The fragment of metal did not obtrude itself, and was not searched for.

The following morning the foot was warm, no pain was felt, and pulsation was present in the dorsalis artery. From this it seems likely that the fragment of bullet had penetrated the artery, and the lower lumen had become obliterated, and the collateral circulation previously established. The wound healed *per primam*, and the patient was discharged from hospital on August 1st, 1915.

I saw him again three months later. His leg was quite comfortable and strong. The only thing he noticed was that after walking hard for a few miles, his calf pained him. Possibly, for active muscular work, the circulation was not yet able to supply the muscles with sufficient blood.

The second case was an aneurysm of the axillary artery. Private W. was wounded at Loos on September 25th, 1915. When charging, a bullet entered just below the outer end of his right clavicle. Immediately lost all power of moving his right hand and arm. He states that he lost a great quantity of blood. There was no exit wound.

On Examination.—When admitted to King George V. Hospital no exit wound could be found. He had complete paralysis of the right arm; sensation was present in the hand and arm, except over the area supplied by the ulnar nerve. He complained of very severe pain in his hand.

It was thought that the bullet was lying near the wound, and an X-ray was taken of the shoulder. To my surprise this did not show the bullet, but showed a comminuted fracture of the surgical neck of the humerus (the bullet was subsequently located in the thorax). The wound healed in a few days, and the arm and shoulder were put up in plaster, with the arm abducted so that if, as was thought likely, an ankylosed shoulder resulted his arm would be in the most useful position.

The plaster was left on for three weeks, and during this time the nerve pain referred to in the hand became gradually less, but at times it was quite severe. The only movement present was a slight power of supinating the hand.

When the plaster was removed a pulsating swelling was present, evidently about the third stage of the axillary artery. The swelling was about the size of a small hen-egg. When the subclavian artery was controlled the swelling diminished to about half its size, and when the artery was released three or four beats of the heart filled the swelling to its original size. The question of treatment lay between ligature of the third stage of the subclavian artery and direct exposure of the axillary vessel, but it was thought that, owing to the extensive matting of the tissues, which appears a constant factor in this type of traumatic aneurysm, ligature of this vessel would have had considerable operative difficulties. This was done and without any advantage to the patient. Ligature of the third stage of the subclavian was therefore decided on. No alteration in the temperature of the limb was subsequently observed, and since the operation, about three weeks ago, there has been no return of pulsation in the swelling, which has almost disappeared. He is now able to move his fingers, and power seems returning every day.

These two cases of traumatic aneurysm have several points of interest. One is that they came on slowly, and in the first case caused no symptoms, so that such cases may readily be overlooked. The first case would not have been noticed if the officer had not come before a medical board, he believing himself quite fit. In the second case my attention was directed chiefly to the fracture, and as Major F. C. Purser was at King George V. Hospital seeing another case, just after the plaster had been removed, I asked him to look at the paralysis in the arm, and he first detected the aneurysm. In this case from the entrance wound and position of the bullet it was hard to see how the humerus could have been broken, unless the fracture was caused by his falling when shot. The patient himself is positive this did not happen, and the appearance of the fracture was against this. The aneurysm was probably caused by an injury to the axillary vessel from one of the sharp fragments of bone.

CONSERVATION OF VISION AND PREVENTION OF BLINDNESS.*

By G. E. DE SCHWEINITZ, M.D.,
Philadelphia.

In a recent novel occur these words: "The light was going fast. . . . With the splendid (I would amend, the foolish) disregard of youth for its most precious gift, Elsa strained her eyes to thread her needle once more." A great schoolmaster, rich in the wisdom of ripe experience, has said: "More eyes are harmed in the home than in the school." Three

* Delivered before the National Committee for the Prevention of Blindness, November 4th, 1915.

children sat on the sidelines of a playground, blinking pitifully and peering uncertainly at their comrades romping over the field. Asked why they did not join the merry throng, they replied, "We can't see well enough to play that game." A group of men and women from the better walks of life watched a company of children at play, inmates of a great institution, all blind, and one-fourth of them the subject of blindness from a cause by which they need not have been enslaved. Voicing a popular belief, one spoke thus: "Isn't it pathetic, and yet how cheerful they are; how sweet their dispositions." Shall such sweetness, such cheerfulness, I ask you, be purchased with the coin of blindness?

Two years ago Henry Copley Greene, writing concerning the subject which interests us, issued a "challenge to the professions"; to-day I would in like manner (I wish I were the master of Mr. Greene's incisive language) issue, not a challenge, but an appeal, to society, and ask five questions: Shall Elsa be allowed to trifle with her most precious possession? Shall our homes be permitted to disregard the laws of visual hygiene? Shall children, and those children of the larger growth—men and women—remain on the sidelines because they can't see well enough to play that game, the great game of stirring life with its joy of untrammelled effort? Shall they not have a game which they can play? Shall we of these better walks of life pursue our ways in snug contentment, and permit the preventable causes of blindness to continue their black business and ever add to the roll of their victims?

Of the blind population of our country, in general terms these are the component parts: Those who are really blind, for whom the light has gone out; those who still perceive the light, an even more pathetic group; those who see something (with the better eye) as we paradoxically phrase it, the practically or partially blind. But the matter does not end here. There remains the great group, excluded from the blind population by strict definition, but excluded, too, in large measure, from the ordinary avocations of life whereby bread is won, the "partly sighted." They are not at home in the world of those who have sight, or in that of those who are blind. They dwell in the borderland. They sit on the sidelines.

Let me turn for a moment to the blind. For our present purpose it is not necessary to argue about accuracy of statistical tables; it is safe to say that fully 100,000 men, women and children in this country are, within the strict definition, blind; one-fourth of this number need not have lost their sight—the causes of their misfortune are in large measure preventable. These 25,000 persons, by their blindness, deprive the country yearly of about eight millions of dollars' worth of productive labour. Now, the financial stability of our country is not disturbed by this loss of income; we can afford it; we cannot afford the stigma which the loss entails. Because we want this blot erased, we are here to help in the work of health education and of eyesight protection; we are here to call on society for aid in devising measures and for means to carry them out in order that effective results shall merge into perfect victory. We are here, too, I take it, to cure those who are dull-sighted in this regard, so that with vision cleared they shall join in the struggle for ocular conservation and make it possible to give sweetness of disposition and ever-present cheerfulness, not to the blind (the good God attends to that) but to those who shall be saved from blindness.

The problems are manifold, and their solution of necessity varies in difficulty. Much result-begetting labour has been expended, and we are deeply in the debt of many physicians in their individual capacity and in their State and national organisations, and in the debt, too, of many lay men and women, who also in individual capacity, organisation and in special field work have given a fine example of generous activity and effective service, which it is a joy to remember and a privilege to record.

The efforts to prevent blindness have been directed through many channels—legal, professional, institutional, social and industrial. They have often been described, and with most of them all of us are familiar. Time does not permit me now to do more than touch on one or two points. Twenty-five per cent. of the inmates of schools and asylums for the blind have lost their sight from that ocular disease usually named ophthalmia neonatorum, which is a conspicuous cause of preventable blindness. About 65 per cent. of the cases of ophthalmia neonatorum are due to a micro-organism of high pathogenicity, and this virulent type of the disease, it is estimated, is the cause of approximately 8 per cent. of the blindness in most of the regions of our country. If suitable measures are brought into action to check its ravages, the ocular mortality can be greatly reduced.

In general terms, the measures devised and in operation for the elimination of this preventable cause of blindness are education, compulsory notification, the punishment by law of offenders against properly constructed legal regulations, and compulsory prophylaxis.

EDUCATION.

In any programme for the prevention of blindness, education and its collaborator "publicity" properly receive large attention. Education intimately concerns the midwife and other persons who have charge of a new-born child, and it should be a prerequisite for the registration of midwives that they should give satisfactory evidence of a proficiency in the knowledge of the dangers and prevention of ophthalmia neonatorum. It is directly related to the duties of teachers of ophthalmology, obstetrics, bacteriology, sanitary science and hygiene, who should so instruct their students in this important subject that they may acquire not only the necessary information, but also a decent respect for their future responsibilities in this regard. But even more important are the education which should be received by the mother who expects to bring a child into the world, by those who constitute her family, by her neighbours—and, in short, by the society to which she belongs, and the methods by which this education shall be imparted. To one method I shall refer.

At stated intervals, in communities in which numerous foreigners and negroes of the poorer class are gathered together, from whom many of the most virulent types of this disease are recruited (*a*), meetings are organised, and the dangers of the disease are detailed and the methods of overcoming them are described, not by a physician, a social worker, or a visiting nurse, whose advice even when tactfully offered is often resented or regarded with suspicion, but by one of their own number, whose words receive respectful attention, and who has acquired influence in the community. His lecture or talk has been prepared for him in the simplest language, and is read or recited by him at the meeting described, always in the language spoken by the majority of his audience, and is illustrated with suitable lantern slides. In these circumstances mothers soon realise what they have a right to demand in the way of attention when their children are born; what they shall insist shall be

(*a*) Children of English-speaking parentage are by no means immune; for example, among 116 cases of ophthalmia neonatorum treated in the Gardner ward of the Massachusetts Charitable Eye and Ear Infirmary, according to some published statistics, it was found that 73 had come from English-speaking parentage and 63 from homes that were considered to be good. The scheme of instruction outlined above does not of course apply in circumstances like these.

done, and insistently done, if the eyes of the newborn baby show signs of inflammation; and what penalties may be imposed and must be paid if those in attendance disregard the danger with which the mother is now familiar.

I do not deprecate the excellent results which have followed campaigns of publicity, illustrated lectures, exhibits, newspaper articles, and the distribution of pamphlets of instruction, but I have potent reasons for believing that knowledge thus filtered into the homes of those who are likely to be affected receives an amount of attention far exceeding that which is given to the more usual courses of instruction to which I have referred, and many others who have followed this plan can give like testimony. Had I time I would read one of these lectures, prepared for just such meetings as I have described. For this method of conveying information we are indebted to Miss Henrietta B. Ely.

Compulsory Prophylaxis and the Free Distribution of a Prophylactic.

It is generally—and, I think, correctly—assumed that since the introduction more than thirty years ago of the Credé prophylactic method there has been a decrease in the number of cases of ophthalmia, at least in large institutions in which trained nurses and trained service are available. Most of us agree that in hospitals entirely devoted to obstetric service, or in hospitals in which large wards exist for this purpose, a modification of the original Credé method in the sense that the strength of the prophylactic is reduced from that originally recommended is of great value. While I do not doubt, as Mr. Van Cleve and others have pointed out, that the distribution of vials of a 1 per cent. solution of silver nitrate to registered physicians, nurses and midwives has proved to be an advertising device both effective and informing, I do doubt whether this is a remedy which it is safe to place in the hands of those who are improperly instructed, or who altogether lack instruction, but who none the less perform the duties of a midwife, and I further doubt whether a leaflet containing directions as to how these vials shall be used is of much service to any of these imperfectly educated persons, and I regret to say that imperfection in education in this respect is not alone a fault peculiar to midwives. I have seen so many severe silver catarrhs in my life, and have certainly seen at least half a dozen eyes badly injured by the reckless or improper use of silver nitrate, that I am inclined to agree with some of the contentions that are prevalent in England, particularly those of Mr. N. Bishop Harman, although I do not dispute the efficiency of the Credé method, and believe it to be essential in institution work and in the hands of those who are competent to use it.

Three years ago I endeavoured to ascertain, with the aid of the secretary of the committee on the prevention of blindness of the New York Association, whether any advantage or disadvantage had been derived from the compulsory distribution of a prophylactic agent against ophthalmia neonatorum. At that time the files of this office had no statistics to offer as to the advantage or disadvantage in these circumstances, and one was obliged to conclude, as the committee of the American Medical Association had pointed out, that the matter could be settled only by a consultation between committees of experienced physicians which exist in each State and the Departments of State public health.

I am fully aware that the distribution of a prophylactic among trained midwives and used by skilful physicians is capable of reducing the percentage of ophthalmia neonatorum, and it may even be, as Wootton has stated, that where the rigid supervision of midwives is enforced and where the training of midwives by accomplished obstetricians takes place, a greater number of cases of ophthalmia occur in the practice of physicians than in the practice of midwives.

But this does not answer the objection which pertains to certain dangers which belong to the unrestricted distribution of the silver prophylactic, and if it is true that we are yet without the necessary information which should be on file, and which should decide whether the advantages derived from the compulsory distribution of a prophylactic agent against ophthalmia neonatorum outweigh certain disadvantages, we ought to have it as soon as possible. A consultation between committees of physicians and departments of health before referred to may be useful, but only too often represents a rather slow-working piece of machinery, and it would therefore seem to be imperative that one of the first duties of a national committee for the prevention of blindness should be to make, with the co-operation of the various State associations which are concerned in this vital business, an intensive study of this whole subject—a study which should be controlled from its central office and undertaken by field agents and others interested in this important matter. This becomes especially important because of the recent statement of one of the greatest of Continental authorities that sophol should be used in place of "the formerly employed Credé silver prophylactic."

In the absence of satisfying knowledge on this subject, and so far as my present personal experience is concerned, I believe that compulsory notification represents the most effective method at our command—a notification which should go at once to a legally qualified practitioner, or to a responsible board whose officers can quickly command the services of someone skilled in the treatment or the management of ocular disease. This usually secures promptness in treatment, and evidently, as Lucien Howe has said, should there be neglect in reporting, and should the strong hand of the law reach out to a person—no matter who he or she may be—who trifles with the vision of an infant, the effect is extremely salutary.

As is frequently the case, a district physician or registered midwife, recognising ophthalmia neonatorum in its earliest stages, sends the child to a competent eye dispensary, and the daily treatment is excellent, but it is not enough; it is the constant supervision of these eyes by trained persons which saves sight. Since all properly managed hospitals at the present time have as part of their equipment a social service, the difficulties of home treatment have been lessened, and the follow-up system has been productive of admirable results—as witness the value, for example, of this type of work in Boston and other cities.

And yet even the social worker and the follow-up system are not always able to control home treatment, or at least not able to make it as effective as the virulence of the inflammation of the baby's eyes may demand. In some cities there are hospitals with wards specially arranged, like the admirable Gardner ward of the Massachusetts General Hospital, for the treatment of these diseases, but many hospitals have no such wards. Not only have they no such wards, but many of them do not admit these cases.

In a collective investigation made by a member of my staff, Dr. T. B. Holloway, of forty-two hospitals in Pennsylvania, only two returned an unqualified statement that ophthalmia neonatorum patients would be accepted. Very properly, he concludes that hospitals receiving State aid should be compelled by law to provide suitable accommodation for the victims of ophthalmia neonatorum. More-

over, society, in the general sense of the term, which supports certain other hospitals not accepting State aid, should demand that they shall make similar provisions. The National Committee for the Prevention of Blindness should force this issue with all the influence it can command—not only because it represents a real work of humanity, but also, if you choose, from a commercial standpoint, because it would mean a reduction of the blind from this cause, and therefore a lessening of the economic loss to the commonwealth in which these hospitals exist.

In one State of this Union it has been computed that 100 of the young blind have lost their sight from ophthalmia neonatorum, and that these 100 young persons will eventually cost the State $300,000 for education alone, while the economic loss to the commonwealth because of their lifelong dependence will be many times that sum. Three years ago, in the State of Pennsylvania, $123,000 was appropriated by the commonwealth to four institutions or organisations for the blind, and approximately $32,000 of this money was devoted to the welfare of those who were blind from ophthalmia neonatorum. Moreover, as Dr. Holloway in his admirable report on the subject points out, it costs the State of Pennsylvania approximately ten times as much to educate one blind child as it does to educate one seeing child. Perhaps if these figures, and similar estimates which could be readily gathered in the various States, were presented to the legislators, they would see fit to take into serious consideration such a law as I have ventured to suggest, especially if it were made plain that if a child with ophthalmia neonatorum in the earliest stages of its development can be transferred to a ward specially devoted to the treatment of this disease, except in rare circumstances, the inflammation can be brought into control and sight saved.

Trachoma and Glaucoma.

Ophthalmia neonatorum and its ravages are so conspicuous that they have received, I will not say undue attention, for too much attention cannot be paid to this subject, but an attention which has overshadowed the importance of many of the other preventable causes of blindness. There is some danger that people outside of the medical profession and of the organisations devoted to visual conservation shall come to regard the prevention of blindness and the prevention of ophthalmia neonatorum as synonymous terms, and unwittingly fail to realise the scope and possibilities of the National Committee for the Prevention of Blindness. The same, in a certain sense, as Dr. Alger has pointed out, is true of trachoma, and important as the subject is from the standpoint of control of immigration, as well as from the standpoint of the elaboration of facilities for the management of this disease, now happily increasing on all sides, I shall not make further reference to it. Neither shall I attempt to discuss toxic blindness and its prevention, or the problems which surround certain infections, dyscrasias and constitutional diseases in their relation to the degradation of vision, or industrial blindness.

I wonder if it is generally realised how large a percentage of blind persons owe their loss of sight to the disease glaucoma. This disease shall serve as a sample of some of the work which it would seem to me pertains to such an association as this is and proposes to be. If a study is made of the cases of blindness in hospitals, it will be found that the percentage of blindness from glaucoma often exceeds that from any other cause; such an investigation was undertaken by the Massachusetts Commission for the Blind in 1910. To prevent this disease—or, rather, to check it after it has been discovered—Mr. Greene suggests eugenic education, inasmuch as it is sometimes hereditary, the wise distribution of public clinics, and the careful record of the social worker's desk of patients who have come for the relief of glaucoma, so that they shall come under the influence of the follow-up system. All these suggestions are good, but a great difficulty is that patients with the non-painful, so-called chronic types of glaucoma often report too late. They do not realise what has been slowly taking place, and come only when vision is so far degraded that they are helpless. We educate, or try to educate, households in the dangers and symptoms of ophthalmias. Why not educate them in the early symptoms of glaucoma? I called to see a woman blind, or practically blind, from this disease not long ago, and while evolving the history—the long, pathetic history—I was struck with an expression of one of the children in the family, who remarked, "We used to wonder when mother took us to the movies why she always saw coloured rings around the lights." If only "mother" had known what those coloured rings meant there would be one less blind woman in the city from which I come.

Now, the social worker who makes, to use Mr. Greene's expression, a calendar of glaucoma patients in any hospital, and properly follows them up, will do much, for it is through this channel that the education most readily passes to the races among which this disease is most prevalent, and who are the best customers of the eye clinics. Furthermore, an important function of social service is concerned with the recognition of symptoms in those who sadly need attention, but who have never presented themselves for examination—not only in the house which is visited, but also in the neighbour's house—and quickly the knowledge of the symptoms of any disease which demands prompt treatment filters through a crowded street. Such a disease is glaucoma, with its long prodromal period, just the period during which the disease can be stopped before it has produced changes which are practically irremediable. I take this affection as an example. To many other ocular conditions the same plan of prevention applies. Therefore, it would seem that a national committee for the prevention of blindness should control a social service as part of its equipment, whose workers should specialise in ocular diseases, and who should in this regard assist in the extension of this work of the hospital physician into the life and home of the patient, and who would be attached to eye clinics and dispensaries which cannot afford the important help which comes from trained service of this character. The foundation of such a social service, controlled and supported by the National Committee for the Prevention of Blindness, would be welcomed by the social service organisations of this and other cities; it would possess both graduate and postgraduate possibilities, and would represent another arm of the great service which is dedicated to the work of saving sight. Time does not permit me to elaborate the plan and its effectiveness. I am sure society would realise the advantages which would spring from it, and, I trust, would support it.

Work of a National Committee.

The work of a national committee for the prevention of blindness should not be concerned alone with the prevention of blindness, in the strict sense of that term. It ought to be concerned with, and surely is much interested in, the elimination of the evils which spoil eye efficiency. I am thinking about Elsa and the fading light, and I am thinking, too, of the kind of light that ought to exist in homes, in schools, in factories and in stores. To be sure, a great deal has been done along these lines, and is part of the committee's work. Think how much

has been accomplished since the almost universal examination of school-children's eyes has been made practically obligatory, and the problems of proper lighting have been carefully studied. Think how much good has been done by the Council on Health and Public Instruction of the American Medical Association in its publication of the "Conservation of Visions" series, under the stimulating influence of the capable chairman of the Committee on the Conservation of Vision, Dr. Allport. I venture to suggest that a national committee such as this is should have a sub-committee concerned entirely with the important question of illumination.

Doubtless every ophthalmologist can testify that scarcely a month goes by during which he is not consulted by some school or college or public institution as to the best type of illumination. Men in charge of these institutions want to know authoritatively about what Mr. Ferree calls the efficiency of the eye under different systems of illumination. We are all aware that the rays emitted by artificial lights, when studied with a spectrum, show a remarkable variety, and the potent remarks of Mr. Parsons on this subject may be emphasised—to wit, that too often the aim of inventors has been to attain a maximum efficiency, that is, a maximum illumination at a minimum cost, and comparatively scant attention has been paid to physiologic efficiency, and too little attention to the quality, that is, the wave lengths of the rays emitted by artificial sources of illumination. Would it not be a good thing if there was a department of the National Committee for the Prevention of Blindness to which application could be made for the latest information in regard to illumination? You may say that there are always illuminating engineers at the disposal of those who are interested in building operations, and, of course, such a department as I speak of would have to be in consultation with illuminating engineers and would need them on its staff. You know that doctors constantly appeal to the *Journal of the American Medical Association* for information on any given topic, medical or surgical, and know how admirable the replies are. Would it not be perfectly possible to have an information department on illumination and its relation to visual efficiency and the conservation of the eye, a department to which the inquirer could turn for the latest practical scientific information on this subject? I do not question that it would be supported handsomely if it were known that it had been established, and you would not have far to go for the chairman of that information bureau. You have him right here heading the list of your board of directors. The work of such a bureau would be interesting and effective.

According to Mr. Van Cleve, the most important part of this national committee's work at the present time is carrying on educational propaganda, furnishing material for workers in the field and inspiring such workers to service, and he believes that in these particulars its obligations are being met. He is fully alive, however, to the importance of creating through this national committee an agency for devising means to protect, care for and conserve vision. Indeed, it would seem to me, and I have no doubt seems to all of those who are concerned with the management of this organisation, that conservation of vision in the widest acceptation of the term should be a function of paramount importance in the administration of its affairs. It is impossible in the time at my disposal to do more than make reference to the problem, for example, which surrounds the education of those who are highly myopic, the necessity of classifying them according to the degree of their visual defect, and of arranging their work accordingly. This has been the subject of much study on the part, for example, of Mr. N. Bishop Harman in London, where, as you know, there are schools—or, if not schools, departments in schools—where these high myopes, properly graded, are instructed with full consideration of their visual handicap. The same is true in the city of Berlin.

Schools for the Blind and Partly Sighted.

But it must be evident that there are many children who, in general terms, are classified as "partially blind" and "partially sighted," and they constitute an essentially different group from the myopes to whom I have made reference. As Mr. Burritt puts it, from the point of view of the educator of seeing children, they are "partially blind"; from that of the educator of blind children they are "partly sighted." They represent the class of which I spoke earlier in this paper, who, in general terms are not blind enough to be in a school for the blind, but who are too blind to keep pace with those who are in schools for the sighted. They are visually handicapped; they sit on the sidelines and cannot play the game.

It is not my province, nor is the time an opportune one, to discuss the co-education of blind and sighted pupils, or whether Mr. Harman's suggestion that all partially sighted children shall be excluded from schools for the blind shall be followed, or whether arrangements should be made in these schools for the blind to take care of those who have some sight. But it is interesting to know that there exist in some form in connection with the public schools of twelve States in the United States classes for the visually handicapped, and in most of these public schools there is a provision for the co-education of the blind and sighted. But more important, it seems to me, are those classes which have been instituted in Boston, in Cleveland, in Toledo, and in Cincinnati for the partly sighted children, even if the educator of seeing children looks on them as partially blind. Certainly provision should be made, as Mr. Burritt and Dr. Halloway point out, for the instruction of these children in connection with the schools of the children who have normal sight, because these visually handicapped persons must make their way through life not as blind, but as sighted people, and their associations should therefore be with those who see, and not with those who are blind.

It is a matter of great satisfaction to read the report of Mr. Irwin, who has charge of the special classes in the Cleveland public schools, sent within the last few days to our institution at Overbrook, that there are now four centres in the Cleveland public schools for totally blind children, and four for those who are partially blind—that is, partly sighted. The importance of having a number of centres must be manifest to everybody, as it solves at once the difficulties of transportation. Much is being done for these borderland dwellers, but much more can be accomplished, and therefore a national committee for the prevention of blindness and the conservation of vision should do all in its power to improve facilities of education in this regard, and should concern itself not only with the conservation of vision, but also with the utilisation of such vision as these handicapped children possess. In each community, through society, proper representations should be made to the various boards of education, so that they shall take up this matter, even as it has been most successfully taken up by some of the schools to which reference has been made.

It must be evident how great a work a committee such as this is and proposes to be can accomplish in this respect. As has often been pointed out, the principles underlying the management of partly sighted individuals depends in largest measure on a reasonably exact classification of the material

which would come under the observation of a national committee which concerned itself with this problem. We know that children with full sight in elementary schools ought not to be lumped together in their courses of instruction, and it has been well said by Harman that "the teaching of all children should be a retail and individual proceeding, not the wholesale, stock-pattern sort of thing that takes place in our elementary schools," and yet it is difficult to get away from this faulty *technique* because of the large number of children who apply for education. With the partially sighted the problem is not so difficult, the material being less great, and the classification could be more readily accomplished. Just here I am tempted to exploit one of my pet theories—namely, that in schools for the blind and schools where the partially sighted are educated, much help could be gained by a sensible application of the principles of modern psychologic research. I am sure this is true in schools for the blind, and I know that Mr. Burritt, of the Overbrook school, agrees with me. I have not time to tell you how I think it would work out, but I cannot help expressing the hope, if not the belief, that an investigation of this character among the partially sighted would help in the classification in accordance with the need of the case of each child, and I would like to see a trained psychologist on the staff of the national committee.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

CERTIFICATES OF DEATH FOR SOCIETIES.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Could you give me any information as to the requirements of benefit and other kindred societies with regard to above. I have frequently been deprived of my fees by some lay hospital official interposing and stating that my medical certificate of death will not do, but that one must be got from the registrar of the district. Practically this, if correct, repeals our right to give death certificates at all. I am, Sir, yours truly,

T. L.

[We do not think that burial clubs and other such societies have any uniform rule as to the evidence of death they require. Some obtain a certificate of death from the registrar; others are satisfied with a certificate from the medical attendant.—ED. M.P. and C.]

TRANSACTIONS OF SOCIETIES.

THE HARVEIAN SOCIETY OF LONDON.

MEETING HELD THURSDAY, FEBRUARY 24TH.

The President, DR. EDMUND CAUTLEY, in the Chair.

THE TREATMENT OF GUNSHOT WOUNDS.

SIR BERKELEY MOYNIHAN opened a discussion on the above subject before a large meeting of members. His paper will be found on page 211 of our present issue. In the discussion that followed,

The PRESIDENT said that from the physician's point of view it had occurred to him that the use of tincture of iodine for antiseptic purposes was a fetish, and that any small benefit it yielded was due to the spirit it contained. With regard to the value of carbolic acid, and of hyperchlorite solution, physicians had for many years used liquor sodæ chlorinatæ for cases of infective and so-called diphtheritic sore throats, and regarded it as of value. Possibly the benefit was analogous to that obtained from the hyperchlorite solutions, indicating that surgeons were now beginning to appreciate the value of drugs.

Another point worthy of discussion concerned the value of Sir Almroth Wright's theories with regard to the bactericidal power of serum. It seemed to him, as an onlooker, that there was no proof that the serum exuded under Wright's method was bactericidal. Its main value seemed to consist in the drainage set up, the production of a *vis à tergo*, which washed the organisms away.

With regard to the value of vaccines, he, like Sir Berkeley Moynihan, was sceptical, and considered that they were on their trial in regard to wound infections. He agreed, however, as to the value of vaccines in such diseases as enteric fever and paratyphoid fever. It still remained to be proved, however, whether it was of value when a patient was already suffering from a poison produced by organisms. There was a great tendency among surgeons, and to a less extent among physicians, to regard *post hoc* as *propter hoc*.

Mr. D'ARCY POWER, who followed, thought that the time had come for considering the after-effects of wounds which had received more or less successful treatment since the war began.

First was the question of re-opening wounds already healed, as where nerve-endings were involved in scars—characteristically in painful stumps; the secondary suture of nerves; unsightly scars, and re-fashioning of stumps. Often the immediate result of these operations had been to start a further course of suppuration, apparently because the pyogenic micro-organisms had been lying inertly in the healed wound. He was therefore inclined to defer secondary operations as long as possible. He also desired to know the experience of others about the course taken by dense infiltrating scars, the result of prolonged suppuration in extensive laceration of the soft tissues. His own opinion was that graduated movements made by the patient, and massage, made the tissue much more supple and amenable to treatment, making excision of the scar undesirable, at least, during the earlier periods. He felt sure that the immobilisation treatment of fractures and suppurating joints was carried to unnecessary lengths, and that when pain had ceased and the patient felt security on the limb massage and less splinting might be done. Stiff joints were best treated by bending under a general anæsthetic, but this was undesirable in the case of septic joints; in their case the septic inflammation should be allowed to subside for many weeks.

Turning to the medical side, those in general practice would have to bear in mind that numbers of their male patients had suffered from jaundice and would consequently be liable to inflammation of the gall-bladder and from gall-stones.

Mr. W. H. CLAYTON-GREENE said he had learned a good deal from Sir Berkeley Moynihan's able address. He, the speaker, had always a liking for antiseptics in surgery, and he thought their use should be encouraged. The one Sir Berkeley mentioned was an old one under a new name. Years ago, Mr. Edmund Owen, when he washed his hands before operating, used bleaching powder to sterilise them. But it must be remembered that all antiseptics were poisons, and some people showed a great intolerance for certain drugs. When the surgeon found that a wound was not doing well

under a certain treatment he naturally changed it; and he, the speaker, was much interested in what Sir Anthony Bowlby said in his Bradshaw lecture when emphasising the value of change in the treatment of wounds, and a variation in the antiseptic employed.

With regard to vaccines, the difficulty was that in carrying out Sir Almroth Wright's method one had no controls. In a given case vaccines were employed, and the patient got well; but the surgeon probably said the recovery was due to the good drainage. There were no controls, and without them he feared that vaccination, whatever its merits, would never receive its due recognition. He recently had two cases of streptococcal infection which recovered comparatively quickly after the use of vaccines; he did not think either of them would have recovered otherwise. But polyvalent vaccines should not be employed, only autogenous.

With regard to gunshot wounds, recent cases he had had very little experience of. He thought there should be very adequate drainage of the wound, and any foreign body in it should be removed at the earliest possible moment. When immediate amputation was practised for virulent infection and for gas gangrene, he asked whether the general opinion as to amputation by circular incision without flap formation was favourable or otherwise. The cases seen over here after that amputation had been practised were anything but encouraging.

He was chiefly concerned with the cases at a later stage as they came to the hospitals in England. By that time they were usually suppurating profusely. Some contained foreign bodies still. In many the agent of suppuration was the streptococcus, an organism which resisted the saline treatment. He asked whether it was advisable to make use of the new antiseptic in chronic infective cases, some weeks or months after the infliction of the wound. He had found the application of antiseptics to these chronic wounds was infinitely superior to the use of saline solution. An important problem was that in which the patient returned with a comparatively small wound discharging pus, and with a foreign body at the bottom of it. What was the proper treatment for such a septic sinus? Some of the cases were very obstinate. The danger in interfering with them was that of opening up fresh avenues of infection. Exploration should be deferred until the streptococcus had been got rid of. This he thought could be brought about in two ways, by prophylactic vaccines, and by Bier's method of cupping.

Concerning amputations, he believed that at the beginning of the war there was a fashion to amputate in nearly every case, by circular flaps or by no flaps at all. Then, later, surgeons were warned that they were amputating too readily, and that greater efforts should be made to preserve the affected limb. It was necessary to consider whether either of these methods was extreme. He thought that in the last few months there had been too great a tendency to try, at all costs, to save limbs, often at the risk of the loss of life of the patient. Some of the cases which had been sent across to him had been wasted and exhausted, and were evidently agonised with suffering, and begging to have the limb taken off. He had seen a limb arrive twisted and distorted, with a fixed joint, and riddled with tubes; and he had asked himself how a surgeon could be expected to save such a limb and make it good again. Even if it could be done, what months of real suffering the patient would have to undergo in the meanwhile. He wished to ask the surgeon to consider whether his desire for conservatism did not somewhat override his sympathy for the patient's sufferings.

Mr. Donald Armour welcomed Sir Berkeley Moynihan's iconoclastic method of dealing with the question of the use of tincture of iodine for wounds; it was a fetish which would probably now be demolished. Applied at the eleventh hour, he did not see how iodine could be expected to sterilise the skin. A very important point indeed was the need for free drainage of these wounds. In the South of England he had received cases from the firing line fairly early in which there was a lamentable lack of free drainage, possibly through lack of time to attend to the rush of cases. He regarded efficient drainage as a *sine qua non* in these cases. He had been much encouraged by the results following the use of magnesium sulphate and glycerine in these cases. He had done a fair number of secondary operations in common with nerve trouble, but the ill-effects in reopening wounds were associated specially with bone, in connection with which there was a real danger of a re-awakening of an old suppuration. Some weeks should be allowed to supervene before making any such attempt.

Mr. Alexander Fleming, speaking from the bacteriologist's standpoint, said that when he went out to France he found the clinical appearance of the wounds totally different from anything he had seen in civil practice, and that bacteriologically the difference was just as marked. The wounds in general resembled the foul-smelling appendix abscesses of civil life. The infection is primarily fæcal, and the microbes in the early stages are those normally found in the intestines of men and animals—namely, B. aerogenes capsulatus, streptococcus, B. proteus, B coli, and a number of spore-bearing putrefactive anaerobic bacilli (to which latter the foul smell is due), all of which are found in fæces.

In order to trace the source of infection of these wounds, cultures were made from portions of the soldiers' clothing, carefully selecting parts remote from the wound in order to avoid contamination from the wound discharge. These were incubated aerobically and anaerobically, and showed out of twelve samples 10 containing B. anaerogenes capsulatus, 5 containing streptococcus, 4 containing B. tetani, and 2 containing staphylococcus albus. The examinations were carried out in November, 1914, when there was much tetanus among the wounded. These experiments evidently showed that the soldiers' clothing was the source of the wound infection. The evolution of wound infection can be divided into three stages—first, a gross infection with anaerobic spore-bearing bacilli producing a foul-smelling sanious discharge produced by the action of the bacilli on the blood-clot in the wounds: secondly, the anaerobic bacilli disappear and the discharge becomes more purulent, but not as yet like the so-called "laudable pus." Then follows the third stage, consisting of an infection with pyogenic cocci. He considered the pyogenic infection to be the most important part of the sepsis.

In support of this opinion, Mr. Fleming had made the following experiment. He planted human fæces on blood-clot and incubated it anerobically for 24 hours. A loopfull of this culture was transferred to a second tube of blood-clot and incubated like the first, and so on for ten days, in this way reproducing to some extent the wound infection. He found that the early cultures, in addition to streptococcus, contained many B. aerog. caps., B. coli and putrefactive organisms, and that these got gradually less until after ten days all had almost entirely disappeared, except the streptococcus and some Gram-positive bacilli called "Wisp Bacilli" similar to those found in wounds, and so the tenth sub-culture had practically the same flora as an infected wound ten days old.

While wounds may become serious in the early stages from infection with tetanus, gas gangrene, and septicæmia, the streptococcal infection of the later stage is by far the more serious one with which we have to deal. All the septicæmias are due to this microbe. He described two distinct types infecting these wounds (1) the Strept. fæcalis, relatively non-virulent, (2) Strept. pyogenes. A third one he found in about one-third of the cases, an anaerobic streptococcus, which had caused a rapidly fatal septicæmia in the patient from whose blood it had been isolated in pure culture.

He had made observations on the use of pure carbolic acid and iodine solution in alcohol for the primary sterilisation of wounds, and considered that the results were no better than had the applications not been used at all. The later infections of war wounds he considered not essentially different from those seen in civil practice; in both the streptococcus and staphylococcus play the most important part, the former being the more potent factor of the two.

As regards vaccines, he said that since 1903 all forms of sepsis had been treated at St. Mary's Hospital with vaccines, and in a very large number of the cases the benefit seen had been obviously due to the vaccines. They increased the anti-bacterial substances, and he thought that inoculation with small doses of streptococcus vaccine, or of "anti-sepsis" vaccine, which is a mixture of streptococcus and staphylococcus, would be beneficial in the later stages of these wounds; and that two or three inoculations preceding a secondary operation might prevent the recrudescence of the sepsis.

Dr. HARRISON ORTON demonstrated a small sterilisable screen and surface marker for locating foreign bodies in wounds, which can be used in the operating theatre.

Mr. DUNCAN FITZWILLIAMS said he had not seen cases in which sepsis could be prevented in wounds arising in this war. In his work at Malta, he saw cases at least seven days after the infliction of the wound, and the proximity to the case at once convinced one as to its condition. The first set of wounded cases came from the Gallipoli landing; there were 800 of them, and they had been brought in an ordinary ship; 18 or 20 died on their way. The others still had their field dressings on when they arrived. There were only three doctors on board. These conditions, however, improved later, and the hospital boats did an enormous work, as Mr. Edmunds would be able to say.

He wished to emphasise Sir Berkeley Moynihan's point that wounds in the limb should have, as a necessary treatment the immobilisation of the limb. There was then no lymph flow, and the circulation was reduced.

He emphasised the necessity of drainage of wounds. It was impossible for a vaccine, for instance, to do much when a wound was full of pockets of pus.

One's views about antiseptics had now to be scrapped. At Malta, the hypotonic salt solution method was used; the water of the Mediterranean was of about the right strength of salinity. Wounds did much better after that method. The application of antiseptics increased the rate of healing.

With regard to amputations, he remembered three or four patients whom he lost because he did not amputate straight away. He had learned his lesson. He felt sure it was wrong to do without flaps in amputating. If it were a case of gas gangrene the other measure would not save the patient; and if it were not, there was no need to do such a thing. Contrary to the teaching of some books, he would not undercut a single piece of skin in these cases; ordinary retraction would do everything as long as the muscles were cut right.

In reference to exposure of wounds to the air, the majority of those so exposed did well, but in hot countries the fly pest had to be considered; he saw several cases which were fly-blown.

X-rays he considered to be of no value in these cases, except as a surgical instrument for the purposes of locating bullets and other foreign bodies, and to ascertain the interior position of affairs.

Mr. EDMUNDS said he had the opportunity, at an early stage of seeing the cases which came from the Anzac Beach. They were got into an efficient operating theatre within 24 hours. For them a strong mixture on strong cyanide gauze was used. But in later stages of the war, when frequently a bullet passed through the bodies of several dead Turks before entering the patient, infection became a different matter. He fully agreed with what Sir Berkeley Moynihan said about the two antiseptics which his friend Dr. Dakin introduced, but their application required care in all details. It was of no use to put the hyperchlorite solution on only half a wound. After treating a wound with this, in a short time the discharge altered in character: instead of being creamy pus, it became a viscid pus; and if this occurred it was an indication that the material was being properly used; otherwise the recesses had not been efficiently reached. If one could not arrange the gauze in the wound, the latter should be opened freely. The replenishing could be done by any orderly in two minutes. He was as enthusiastic as Sir Berkeley Moynihan in regard to the value of Chloramine. He had kept his supply for a difficult class of mouth cases: there were some cases shot though the jaw, resulting in the palate being blown away. By putting the packing in the wound and keeping it moist with Chloramine, and washing out the mouth at frequent intervals, there was a healing such as he had never seen before. At Plymouth he removed a generous half of the tongue because of malignant growth, and sewed up the mucous membrane, and ten days later he took out the stitches, and during the whole of that time there had been no fœtor in the breath. Chloramine was one of the most valuable additions to the surgeon's kit bag, and he hoped it would soon be put on the market; it was in a crystalline powder, and lasted for a long time. It could be used on mucous membrane, and the bladder could be washed out with it.

Sir BERKELEY MOYNIHAN, in reply, said he would like to put in a good word for the circular amputation. Those who saw cases in which the two methods had been carried out side by side would agree that the only thing to do was circular amputation. If even one stitch was put in, gas gangrene seemed to come on. He agreed with what had been said as to the lingering character of infections in wounds which had been healed; he had seen a patient die of tetanus after passive movement of the shoulder joint had been carried out; and the reopening of a healed wound seemed to revive infections which had become latent. Professor Layton was now working on it, and Mr. Bond, of Leicester, had dealt with the subject.

MAJOR L. COTTERILL, R.A.M.C., has been appointed surgeon on the personal staff in India of Lord Chelmsford, the Viceroy-Designate.

FAKENHAM (Norfolk) jumble sale in aid of the British Farmers' Red Cross Fund made over £4,058, which is a record for England.

SINCE the outbreak of the war nearly 7,000 free treatments have been given at Buxton to invalided officers and men.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF PATHOLOGY.

Meeting held Friday, January 21st, 1916.

The President E. J. McWeeney, M.D., F.R.C.P.I., in the Chair.

CASE OF FOOD-POISONING DUE TO BACILLUS SUIPESTIFER.

The President referred to the case which he had already described in November last as one of food-poisoning due to paratyphosus B. His subsequent study of the causal organism showed that it was really a *suipestifer*, and capable of being distinguished from paratyphosus by both agglutination and absorption tests, diagrams of which he demonstrated.

Professor Mettam asked whether this micro-organism had been tested against pig's serum. He said that *B. suipestifer* was not uncommonly found in swine fever, though the primary cause of the disease was an ultra-microscopic parasite.

The President stated that only highly potential antisera could be used. He had not, as yet, tried the effect of pig's serum on the micro-organism, but would do so on the first available opportunity.

EXTENSIVE HÆMORRHAGIC INFARCTION OF SMALL INTESTINE.

The President also showed the above case. The patient, A. S., æt. 60, a very obese elderly woman, with a small umbilical hernia, was admitted to the Mater Misericordiæ Hospital on January 12th. Her previous history was good. At 11.20 a.m. on the day of admission she was seized with violent epigastric pain; at 2.30 p.m. she took some whisky, which made her worse. She had had a motion earlier in the day, and an enema produced a copious action of the bowels. She vomited once only. There was nothing to point to intestinal obstruction. Her pulse and temperature were normal on admission. The urine contained some albumin. About ten hours after admission she became collapsed, and died quite unexpectedly. At the autopsy the small intestine was found in a state of complete hæmorrhagic infarction from about the middle of the jejunum to a few feet above the ileo-cæcal valve. The corresponding mesentery was also much thickened and infiltrated with blood. The infarction began quite suddenly at a spot where there was a sort of groove across the bowel, as though it had been pressed upon (though not obstructed) by a band. No band was, however, found. The coils of intestine below this were very thick and rigid, almost black in hue and distended with liquid blood. Towards the lower end of the ileum the process gradually ceased and the coils were of normal appearance. Owing to the extreme acuteness of the process there was no peritonitis. Dissection of the affected mesentery revealed no abnormal condition of the arteries. The smaller veins were distended with soft black clot, but the question arose as to whether it could be regarded as *ante mortem*. There were no adhesions and there was no Meckel's diverticulum, nor was there anything in the nature of a volvulus. The cause of the intense engorgement, and the nature of the band which had undoubtedly pressed upon the bowel, remain unexplained.

Dr. J. T. Wigham said that extensive necrosis was sometimes met with in cases of malaria, but he had never seen a case like the one exhibited.

Dr. R. M. Bronte said he had brought forward an almost similar case at the last meeting of the Section, and had met with two other cases recently which varied only in the extent of the lesions, the cause being similarly obscure.

The President, in replying, said he regarded the condition as one of thrombosis, but as death had supervened so rapidly there had been no time for the clots to become adherent to the vessel walls, as in typical *ante mortem* clotting.

PROSTATIC CARCINOMA.

Dr. J. H. Pollock demonstrated specimens from a case of above, with metastases in the lumbar glands and liver. The patient, when admitted to the Richmond Hospital, had complete retention of the urine. Catheterisation was found impossible, and suprapubic puncture was performed. He died shortly after admission. At the *post-mortem* examination the liver was found to be studded with comparatively small carcinomatous nodules. The entire column of the lumbar glands, from the under surface of the liver to the brim of the pelvis, was one white hard mass, which caused substantial aortic compression. A similar large mass was found within the pelvis upon the left side. Upon cutting open the prostate it exhibited an atypical structure suggesting carcinoma. Histological sections from the primary growth and secondary deposits showed typical alveolar carcinoma.

The President said these cases seldom came to autopsy. He considered it unusual to find metastases in the liver, but common to find them in the lumbar glands.

Dr. R. M. Bronte said he had performed autopsies upon two cases which showed no metastases in the liver.

MICROSCOPICAL SECTIONS OF AN ANGEIOMA.

Dr. J. H. Pollock also showed microscopical sections of an angeioma which had been removed by operation. The tumour had been present since birth in the subcutaneous tissues of the inner side of the knee in a young male adult. During the twelve months preceding the operation the tumour had grown sufficiently quickly to attract the patient's notice and cause him some anxiety. It resembled a single varicose cluster. Microscopical sections showed numerous blood vascular spaces lined by several layers of low cubical cells. These cells in certain areas appeared to show complete differentiation into endothelial plates, but in the majority of cases the erythrocytes were directly enclosed by the less differentiated and presumably vegetative cells. These characters, combined with the clinical feature of active growth, would place this tumour in the category of true hæmangeioma as opposed to hæmangeiectasis—a mere dilatation of non-proliferating vessels. He said cases had been reported where such tumours exhibited malignancy, and in one instance metastases had been recorded.

The President said he considered the exhibit as a good specimen of hæmangeio-endothelioma, but missed the continuous lining of endothelium in some of the spaces.

Professor Mettam said he had met similar angeiomata in the liver of animals; these showed several layers of endothelium, and occasionally some of the blood-containing spaces had no endothelial lining.

Dr. Pollock, in replying, said he regarded the proliferation of the endothelium as an essential feature of the condition, though a single layer of cells might be found in some spaces.

BOTHRIOCEPHALUS LATUS.

Dr. T. T. O'Farrell showed a specimen of the above. The patient from whom the specimen had been taken lived in the Co. Longford, on the banks of the River Shannon. The man had suffered for some time from vague symptoms of

"indigestion," but had no pronounced anæmia. He passed the first segments of tapeworm at the end of December, 1915. The usual anthelmintics had been given, and the whole worm was passed; he failed to find the head, but the smallest segments were presented for examination. The following facts were elicited from the patient:—(1) He had always resided in Ireland, except for three trips to England and two to Scotland, each of about five or six days' duration. On these occasions he did not partake of fish. (2) He had frequently eaten fish taken from the Shannon—namely, perch, pike, bream, roach, also eels, but no trout so far as he remembered; they had not been undercooked. (3) Several people partook of the same fish, but so far as he was aware did not suffer from tapeworm. He (Dr. O'Farrell) said this was the first specimen he had seen in Ireland, and in the limited references he had consulted he had not seen the presence of this parasite recorded in Ireland. The tapeworm he had frequently met with was the *T. saginata*.

The PRESIDENT said the tapeworms he had met with were mainly *T. saginata* and a few *T. solium*, but he had not met with the *bothriocephalus latus*.

Professor METTAM always regarded this parasite as practically unknown in this country. He was interested to hear the common finding of *T. saginata* in man, as he had never seen the *Cysticercus bovis* in animals brought to the Royal Veterinary College.

SPECIAL REPORTS.

ROYAL COMMISSION REPORT ON VENEREAL DISEASES.

The final report of the Royal Commission appointed in November, 1913, "to inquire into the prevalence of venereal diseases in the United Kingdom, their effects upon the health of the community, and the means by which those effects can be alleviated or prevented," has now been issued [Cd. 8, 189].

The *Times* gives the following *précis*:—

Among the general conclusions set forth are these:—

(1) In distribution the incidence of syphilis is much higher in urban than in rural areas. The same is probably true of gonorrhœa, though statistical proof is not available to the same extent.

(2) The available statistics afford no satisfactory evidence of the prevalence of venereal diseases, but in the large cities it is estimated that at least 10 per cent. of the population are affected by syphilis and a much higher proportion are affected by gonorrhœa.

(3) Venereal diseases can be controlled and reduced within narrow limits by early and efficient treatment, but at present treatment is in most cases unduly deferred and adequate facilities for the best modern treatment do not exist.

(4) To bring modern methods of treatment to bear on every infected person, Government action is essential.

The effect of the recommendations of the Commission may be summarised thus:—

(1) Arrangements should be made for accurate statistical records of the prevalence of disease, including the confidential registration of causes of death.

(2) Facilities for the diagnosis and free treatment of venereal disease should be organised by the larger local authorities (county councils and county borough councils), the Imperial Exchequer to contribute 75 per cent. of the cost.

(3) No system of notification of venereal disease should be adopted for the present.

(4) Advertisements of remedies for venereal diseases should be prohibited.

(5) Legal protection should be given to medical men to enable them to make confidential communications with the object of preventing or delaying a marriage on the ground of venereal disease.

(6) Infectious venereal disease should be made a statutory incapacity for marriage; and the children of such a marriage should be relieved of the disabilities of illegitimacy.

(7) More careful instruction in regard to moral conduct in sexual relations should be provided throughout all types and grades of education.

THE REPORT.

The report is signed by all the Commissioners—namely, Lord Sydenham (Chairman), Sir D. Brynmor Jones, Sir Kenelm Digby, Sir Almeric FitzRoy, Sir Malcolm Morris, F.R.C.S. Edin., Sir John Collie, M.D., Dr. Arthur Newsholme, Canon J. W. Horsley, the Rev. Dr. J. Scott Lidgett, Dr. F. W. Mott, Dr. Mary Scharlieb, Mr. James E. Lane, F.R.C.S. Eng., Mr. Philip Snowden, M.P., Mrs. Creighton, and Mrs. Elizabeth Burgwin. The signatures of Sir Kenelm Digby and Canon Horsley are subject to reservations.

The disadvantage of issuing the report "when all public activities are pre-occupied in fulfilling the manifold needs of the war" is recognised. But it has been published because "the conditions now existing and those which must follow on the conclusion of the war, imperatively require that action should be taken without delay. The report proceeds:—

"There is no reason to believe that the percentage of infection in the naval and military forces is now greater than in normal times; but there can be no doubt that the total of infected persons has increased. The military authorities are doing their unmost to provide treatment, but the civil population requires corresponding measures, and all experience shows that after a war an excessive incidence of disease is certain to occur, even in districts previously free. . . . We are therefore convinced that it will not suffice to establish treatment centres in places where sailors and soldiers are congregated, and that these will be needed in most of the larger and in some of the smaller towns. We realise the claims of economy at the present moment; but, for reasons we have given, we believe that all necessary expenditure will be recouped by the results which can be obtained."

PREVALENCE.

The Commissioners found that, except in the case of the Navy and Army, there are at present no means of arriving at an accurate estimate of the prevalence of venereal diseases. The tendency to concealment, by militating alike against the acquisition of full knowledge of the extent of their incidence and against the prompt treatment which is so necessary, render them peculiarly dangerous to public health. Moreover, it is only in comparatively recent years that their varied effects have begun to be recognised, while more in this direction still remains to be discovered. Partial attempts to obtain a local census of venereal diseases have been made in some countries; but the results are not such as to justify generalisations. A large number of examinations in institutions, and among special sections of the population, including *post mortem* tests, have been made in the United Kingdom, as in foreign countries, and generally show an unexpectedly large prevalence. The recorded death rate in this country per million for syphilis and the three consequential diseases, distributed among eight classified groups of the population shows the prevalence to be greatest in the unskilled labour class, and least amongst miners and agricultural labourers. But at present registration is defective, many deaths due to this cause escaping recognition. Sir William Osler considers that "of the killing diseases syphilis comes third of fourth." While unable to arrive at any positive figures, the Commissioners come to the startling conclusion that the number of persons who have been infected with syphilis acquired or congenital, cannot fall below 10 per cent. of the whole population in the large cities, and the percentage affected with gonorrhœa must greatly exceed this proportion.

ECONOMIC EFFECTS.

A striking section of the report shows that both the diseases named lead to an enormous annual loss of child life. It is estimated that from 30 to 50 per

cent. of sterility among women is due to gonorrhœa, and of registered still births probably at least half are due to syphilis. Of 1,100 children in the London County Council schools for the blind, at least 55.6 per cent. of the cases are attributable to venereal diseases in the parents. A large proportion of juvenile cases of imbecility, idiocy, deafness, and various forms of skin, bone, and other diseases result from congenital syphilis. It is shown that among adults the loss of working power from the earlier effects of the diseases is important, while in their later manifestations they are responsible for a vast amount of incapacity. In a considerable proportion of cases syphilis, at an average period of 10 to 15 years after infection, shows itself as general paralysis of the insane or locomotor ataxy.

Reference is made to the heavy cost of the public maintenance of persons thus afflicted, and the total economic loss is justly decribed as "enormous." The Commissioners are satisfied that a large proportion of the total expenditure can be saved, and will far more than counterbalance the cost of the measures they propose.

Free Treatment.

By the terms of reference Lord Sydenham and his colleagues were precluded from considering the policy of the much controverted Contagious Diseases Acts of 1864 and 1866, which were repealed in 1886; but they place on record their view that no advantage would accrue from a return to the system. So far from this being the case, it is to be noted that the great improvement as regards these diseases in the fighting services has taken place since the repeal of the Acts. Except in the case of those services, the Commissioners find the existing facilities for treatment are "extremely deficient." They are of opinion that no adequate system of treatment will be organised unless responsibility for it is undertaken by the State. Measures should be taken to render the best modern treatment readily available for the whole community, by the use of special wards in the general hospitals, rather than by the establishment of separate institutions. In reference to the objections still persisting in the minds of some subscribers to general hospitals, the report expresses the hope that "when the facts elicited by our inquiry are made public, the view that morality can be encouraged by denying medical treatment to those who, by violating its laws, have become a public danger, will disappear."

Subject to the approval of the Local Government Board, the councils of counties and county boroughs should organise and carry into effect definite schemes for dealing with the diseases, and as a first step should approach the general hospitals in their areas with a view to making the necessary arrangements. Treatment at any institution should not be restricted to persons resident in a particular area; it should be free to all, and there should be no refusal to treat a patient who is unwilling to go to his own doctor. Special arrangements, such as evening clinics, should be made for the treatment of out-patients at hours convenient for the working classes. Subject to proper safeguards, local authorities should be empowered to supply salvarsan or its substitutes gratuitously to medical practitioners.

Extended facilities should be made available for diagnosis by laboratory methods, and be organised by the larger local authorities, the fullest use being made of the laboratory facilities at universities and hospitals. The Commissioners recommend that one-fourth of the public expenditure for these purposes should be met from local rates, and the remaining three-fourths should be provided by Imperial grants, distributed by the Local Government Board.

Compulsory Detention.

Generally speaking, the Commissioners have been slow to advocate compulion in any form. For example, they report against any system of compulsory personal notification, believing that it would fail to secure the advantages claimed, and that bettter results may be obtained by the improved facilities for treatment they recommend, and by a policy of education regarding the serious nature of these diseases. It is in respect to one limited form of compulsion that the only departures are made from the unanimity of this valuable report. Sir Kenelm Digby and Canon Horsley attach reservations objecting to the proposed detention of Poor Law patients suffering from these diseases, and the former is not prepared to support the thorough medical examination of persons committted to prison recommended by his colleagues. It may be remarked that the principle of detention in Poor Law institutions in cases of diseases dangerous to the community was laid down in the Poor Law Act of 1867. While holding the case for the similar detention of prisoners to be a strong one, the report accepts the opinion that it would be more expedient to rely on the co-operation of Discharged Prisoners' Aid Associations and similar bodies in any general system of free treatment. It is suggested that when an infectious man is entitled to claim his discharge from the Army or Navy he should be encouraged in his own interest to continue under treatment.

The Marriage Laws.

The unanimous proposal of the Divorce Commission that statutory recognition should be given to the principle that infectious venereal disease constitutes an incapacity for marriage and should be a ground for divorce is strongly endorsed. If under the existing law the effect of a decree of nullity is to render the children illegitimate, it should be provided that the disabilities attaching to such a condition should not follow. Another amendment of the law recommended is that a communication made *bona fide* by a medical practitioner to a parent, guardian, or other person directly interested in the welfare of a woman or man, and with the object of preventing or delaying a marriage with a person who is in an infectious condition, shall be privileged communication.

"A Franker Attitude."

Measures are proposed to ensure that every medical student has adequate practical instruction in these diseases. Their treatment by unqualified persons is emphatically condemned as disastrous, and constituting one of the principal hindrances to eradication. The recommendation of the Select Committee on Patent Medicines that all advertisements of remedies for these diseases should be prohibited is endorsed. Approved societies which debar from sick benefits persons whose illness is due to misconduct, but freely admit those who are suffering from consequential diseases, which early treatment would have prevented, are urged to revise their practice.—

"There can be little doubt that a franker attitude towards these diseases would lead to less concealment, often involving recourse to quack remedies, which may retard cure or render it impossible, and would thus assist in checking one of the greatest evils that can inflict a community."

A section of the report is devoted to the important question of public education in these matters. More careful instruction should be provided in regard to moral conduct as bearing upon sexual relations throughout all types and grades of education. It should be based on moral principles and spiritual considerations, and not merely on the physical consequences of immoral conduct. The National Council for Combating Venereal Diseases should be recognised by Government as an authoritative body for the purpose of spreading knowledge and giving advice.

Substitutes for Salvarsan.

As regards anti-syphilitic drugs, it is pointed out that mercury and arsenic proved their value in the past. Salvarsan (606) belongs to the arsenic group. It is a German product and substitutes have been prepared, the most important of which are Kharsivan and neo-Kharsivan and arsenobenzol-Billon, English and French products respectively. Reports of the use of these drugs are to hand and are very satisfactory. It is pointed out that syphilis can be cured if promptly treated by a doctor, and it is recommended that the public should be informed that the disease may be acquired by kissing and by using the same eating or drinking utensils or tobacco pipes

as a syphilitic person. The statistics of the social distribution of the disease appear to show that unskilled labourers head the list. Next comes "intermediate labour," and then the upper and middle classes. At the bottom of the list are miners and agricultural labourers.

The members of the Royal Commission have been invited to join the National Council for Combating Venereal diseases and the majority of them have accepted.

OBITUARY.

DR. JOSEPH PEARCE WILLS, M.D., M.R.C.S., BEXHILL.

Dr. J. P. WILLS died at a Bexhill Nursing Home on February 28th, after an operation. Dr. Wills was the doyen of the medical profession in Bexhill and held a very high reputation, not only as a general practitioner, but as a specialist in lung diseases and mental troubles. He received his medical education at St. Mary's Hospital, qualifying M.B., B.S., Durham in 1880, and M.R.C.S. in the same year. He took the M.D. degree in 1886. He had practised in Bexhill for over 30 years and had been closely identified with all its phases of growth and progress for many years. He was a member of the Bexhill Corporation and resigned his Aldermanship about six years ago. Dr. Wills was formerly M.O.H. of the Bexhill U.D.C., and medical officer to the Bexhill Convalescent Home. He was the author of an essay, "For the Erection of a Sanatorium for Tuberculosis," which was awarded honourable mention in 1902 by the King's Advisory Committee. Of late he had made many noteworthy speeches in connection with war and recruiting.

DR. T. BLASSON, M.R.C.S., L.S.A., BILLINGBOROUGH, LINCS.

THE death occurred at Billingborough on March 2nd, of Dr. Thomas Blasson, one of the best-known members of the medical profession in the district, and probably the oldest acting surgeon in the Southern part of Lincolnshire. His illness only extended over a few days, and he succumbed to an attack of pneumonia. He was educated at Guy's Hospital, between 1852-56, and became clinical clerk to Dr. (afterwards Sir) William Gull, and for about six months he acted as "dresser" for Mr. John Birkett—a famous surgeon in those days. He qualified M.R.C.S. in 1855, and L.S.A. in the following year, and then returned to Billingborough to assist his father in his profession, succeeding him in 1864. He was in practice for 60 years, and died in the house in which he was born.

For many years he was surgeon to Folkingham Gaol until it was closed by order of the Home Secretary. Since the passing of the Public Health Act in 1875, he acted as medical officer and public vaccinator for the district. He was surgeon to the Bourne and Sleaford Railway and the Post Office, and had been professionally connected with the Oddfellows and A.O.F. for upwards of 50 years. Deceased, who was 81, was an active practitioner up to within a few days of his death, always doing his round—sometimes over 20 miles—in an open trap.

MEDICAL NEWS IN BRIEF.

Prudential Assurance Company, Limited.

THE 67th Annual Report and accounts for the year 1915 have just been published. The rate of interest assumed for the purpose of the valuation was 3 per cent. The rate actually earned on the assurance funds exclusive of reversions was £3 16s. 9d. after the deduction of income tax, and for the previous year £4 0s. 1d.

The results of the valuation shew that in the ordinary branch there is a surplus, including £263,724 brought forward from last year, of £1,519,331. In the industrial branch, life assurance fund on December 31st, 1915, £42,714,625, net liability, £41,671,600, the surplus, including £293,947 brought forward from last year, is £1,043,025; whilst the general branch shews a surplus, added to reserve for sickness claims, of £7,236.

The provisions relating to Industrial Assurance contained in the Courts (Emergency Powers) Act, 1914, have resulted in a severe strain upon the Company's resources which has reduced the surplus shown on the operations of the year, and whilst these provisions remain in force the strain must continue. In these circumstances the Directors have not felt justified in drawing upon the £300,000 set aside last year to meet contingent liabilities created by the Act, but have met the loss out of revenue and in addition have felt it necessary to increase the amount set aside by £50,000. The Courts (Emergency Powers) Act Reserve therefore stands as at December 31st, 1915, at £350,000.

An interesting feature of the report is the following letter from the Chancellor of the Exchequer to Mr. May, Secretary of the Company, dated August 4th, 1915. "I have to thank the Prudential Assurance Company on behalf of His Majesty's Government for the patriotic spirit they have shown in placing the whole of their American securities at the disposal of the Treasury at a fair and reasonable price. The transaction has been of considerable assistance in facilitating Exchange operations, and the greatest credit is due to the Company for its prompt action."

Research Defence Society—Dublin Branch.

THE annual meeting was held in Dublin on March 1st. The report stated that the Dublin Branch of the Research Defence Society has been in existence for seven years, and during that period the efforts of the Society had been successful in enabling the public to grasp the meaning and objects of medical research. During the year, the subscriptions had decreased, partly by reason of the war with its many claims, but for the most part because the members and the public considered that the battle for truth is already won, and thought, perhaps, that the Society no longer needs their support. The members ought to congratulate themselves on a great victory, the fruits of which were seen in the many thousands of soldiers saved from death by the results of medical research. There was still need, however, to keep the Society active.

Out of the funds of the Branch a sum of £20 had been contributed to the Parent Society and at the close of the financial year there was a balance to credit of £7 8s. 6d.

Dr. A. D. Waller, F.R.S., then gave an address on Fat Consumption in Time of War. He said that a dominant factor in the German economic situation was the amount of fat for food and for explosives. One hundred tons of fat would yield ten tons of glycerine which could be nitrated to yield twenty tons of nitro-glycerine. Germany had hitherto consumed fat at the rate of 106 grammes per head, *i.e.*, in round numbers, 2½ million tons per annum. For industrial purposes Germany had used half million tons, of which 100,000 tons went to nitro-glycerine. Half had been grown at home; half had been imported. During the first year of war, Germany had required for food, at least half her previous allowance, *i.e.*, at least 1¼ million tons plus 350,000 tons for war explosives; she had not been able to produce this amount at home. She had succeeded in importing it from abroad, and in extracting it from occupied territory. He gave figures as to linseed oil, and dealt with the necessity of stopping the supply of fat to Germany.

Time-Gun and the Soldiers' Nerves.

THE firing of the Dundee time-gun is to be stopped during the war. This step has been decided upon because of a report that the firing of the gun had a very bad effect upon the nerves of a number of soldiers who were suffering from what might be termed "cannon shock."

Large Bequest to King Edward's Hospital Fund.

Isabella, Countess of Wilton, of Upper Grosvenor Street, W., left unsettled estate of the gross value of £290,488, of which £279,789 is net personalty.

Amongst other legacies, Lady Wilton bequeathed £1,000 each to the Hospital for Epilepsy and Paralysis, Maida Vale, W., the Fever Hospital, Islington, the Taunton and Somerset Hospital, and the London Hospital. The residue of the estate, which apparently represents over £200,000, is left to the King Edward's Hospital Fund.

The London Hospital.

The report presented at the quarterly meeting of the Governors of the London Hospital on March 1st, referred to the need of opening the wards presented by the Grocers' Company for the salvarsan treatment of specific disease, "which to-day is endangering the welfare and future of our people, and must be stopped." It said that it was not easy for the Governors to undertake that work, as last year, owing to the increase in prices, they had spent £14,000 more than they had received.

The increased cost of provisions accounted for nearly £10,000, while the prices of drugs had increased to an abnormal extent. The meat bill was nearly £3,000 up; milk nearly £2,000; fish and poultry, £700, and vegetables nearly £400.

Eyesight and Commissions.

In reply to Mr. Duncan Millar, who asked what is the present standard of vision required in the case of applicants for commissions in the Army and the Reserve, and whether applicants who are below the standard required for active service are being accepted for home service, Mr. Tennant states:—The vision of applicants for commissions in the Army must not be below 6-24 without glasses and after correction with glasses it must be normal in the better eye and 6-12 in the other. For candidates for the Special Reserve of Officers the standard required is as just stated, except that vision without glasses in each eye must not be below 6-36. There is no special standard required for active service as distinct from home service.

Birmingham Children's Hospital.

A warning note as to a coming scarcity of medical men for hospital work was sounded at the annual meeting of the Birmingham Children's Hospital held on February 28th.

The Medical Committee reported that in view of the increasing demands of the army and the increase in the cost of drugs they were of opinion that the question of further limitation of work in the out-patient department would have seriously to be considered, and the number of out-patient operations reduced.

Mr. B. J. Ward (chairman of the Medical Committee) pointed out that it was likely the services of medical men to the hospital would have to be curtailed before long. Every medical man under 45 years of age was now being requested to accept a commission in the R.A.M.C., and to hold himself in readiness to be called upon. The War Office were forming a huge reserve of medical men for the push when it did take place. It was impossible to say when it would happen, but probably it would take place during the next two months. Then the medical men would be called to the colours, and the hospitals would be left to look after themselves. In the circumstances it would be wise of the committee to make arrangements to face the difficulty. To his mind it was almost certain to occur. The medical men were not likely to receive much notice; it might only be a few days.

Royal Gwent Hospital.

At the annual meeting of the subscribers of the Royal Gwent Hospital on February 25th, Sir A. Garrod Thomas, D.L., who presided, submitted the directors' report which showed that the number of in-patients treated during 1915 was 1,403, while 8,114 out-patients received treatment during the year. The income amounted to £11,920 14s. 8d., and the expenditure £10,775 13s. The accumulated deficiency £3,669 18s. 8d., at December 31st, 1914, had been reduced by £1,145 1s. 8d., and the deficiency now stood at £2,524 17s. Workmen's contributions were the highest on record, and a house-to-house collection resulted in £521 3s. 10d. being paid over, while Queen Alexandra's "Rose Day" yielded £288 19s. 9d. Within the next few months it was expected that the new wing would be completed and the necessary equipment provided. This would provide an additional 18 beds, two more operating theatres, and an improved casualty department.

Dealing with the question of the honorary staff, he said things looked very gloomy. Their doctors had gone off with the colours, and they were now seven short. They also had a difficulty in securing house surgeons. They found it was impossible for them to compete with the khaki, cash, and kudos of the War Office.

The National University of Ireland.

The Senate met on Wednesday, March 1st, 1916.

The Senate directed that the Special Examination for the Degrees of M.B., B.Ch., B.A.O., to be held in June, 1916, shall be open only to candidates who, if qualified as a result of that examination, undertake to apply at once for commissions in the Indian Medical Service, the Royal Army Medical Corps, or the Naval Medical Service.

Heavy Infantile Mortality at Dundee.

The annual report of the Dundee medical officer of health states that the number of infants who died in the first year of life in 1915 was 821, and the infant mortality rate for the year was 209 per 1,000 births. This is the highest figure recorded since 1893, when it was 217. It was entirely due to a serious outbreak of whooping cough and measles and an increase in the deaths from bronchitis and pneumonia, which always accompanied these diseases, especially in severe weather.

Bradford Eye and Ear Hospital.

The annual meeting of the Royal Eye and Ear Hospital, Bradford, was held on February 25th, under the chairmanship of the Lord Mayor.

In the course of the annual report the committee of management stated that they were glad to report affiliation with the Bradford War Hospital, and that their offer to undertake eye and throat work had been accepted. During the year 1915 there were 7,702 new cases in the out-patient department, compared with 7,814 in 1914, and 1,045 old cases, compared with 1,597 in 1914. In 1915 the aggregate of days and occupied beds for in-patients was 12,779. There were 1,611 operations. The total expenditure for the year was £4,520 8s. 10d., and the receipts amounted to £3,937 13s. 3d. Notwithstanding the transfer of £1,964 from the Special Appeal Fund, there was still a debt of £4,365 on the hospital. The institution had been able to afford treatment to a considerable number of His Majesty's forces, as well as a large number of cases of minor accidents amongst munition workers. Numerous Belgian refugees had also been helped. Of considerable benefit to the working of the hospital had been the taking of the Christ Church vicarage as a home for the nursing staff.

Hospital Benefits by the War.

The Bishop of St. Asaph presided at the annual meeting of the Royal Alexandra Hospital and Convalescent Home at Rhyl on February 26th.

The report stated that considerable demands had been made on the hospital by the military, and the increase in the receipts had enabled the committee to extinguish the building debt and to carry forward a substantial balance.

Central Midwives Board for Scotland.

The Privy Council has intimated approval of the appointment of Mr. D. L. Eadie, 50, George Square, Edinburgh, as Secretary to the Central Midwives Board for Scotland. All communications thereanent should be sent Mr. Eadie at the above address.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

CLINICAL LECTURES, PAPERS, ETC., RECEIVED.

THE following have come to hand, and are hereby acknowledged with thanks:—

GRENET, PROFESSOR M. H., Médecin des Hôpitaux, Paris. "Treatment of Acute Articular Rheumatism with Intravenous Injections of Colloidal Gold."

MACKENZIE, DAN, M.D., F.R.C.S.Edin., Surgeon to the Central London Throat and Ear Hospital. "Folk Cures by Constriction and Rings."

MOYNIHAN, SIR BERKELEY, F.R.C.S.Eng. and Irel., Professor of Clinical Surgery, Leeds University. "The Treatment of Gunshot Wounds."

NEWBOLT, G. P., F.R.C.S.Eng., Surgeon to the Royal Southern Hospital; Lecturer and Examiner in Clinical Surgery, Liverpool University. Clinical Lecture on "Cancer of the Breast."

NEWTON, RICH, C., M.D., Montclair, Jersey. "The Origin of Auscultation and Percussion in Laenneo's Time."

PARKER, RUSHTON, M.B.Lond., F.R.C.S., Professor of Surgery in Liverpool University; Consulting Surgeon, Liverpool Royal Infirmary. "Fæcal Fistula of the Abdomen."

ROBERTSON, GEO. M., M.D., F.R.C.P., Physician-Superintendent, Royal Asylum, Edinburgh. "The Employment of Female Nurses in the Male Wards of Mental Hospitals."

ROLLESTON, J. D., M.D.Oxon., B.Ch., Medical Officer, Grove Hospital, Tooting, London. "The Blood Pressure in Typhoid Fever."

RUSSELL, WM., M.D.Edin., F.R.C.P., Professor of Clinical Medicine in Edinburgh University; Physician to the Royal Infirmary, Edinburgh. Clinical Lecture on "Two Cases of Malignant Disease of the Body of the Stomach."

THOMSON-WALKER, J. W., M.B., F.R.C.S.Eng., Surgeon to King George's Hospital, and to St. Peter's Hospital for Stone. "Hexamine at a Urinary Antiseptic."

WHITEFORD, C. HAMILTON, M.R.C.S.Eng., Surgeon to the South Devon and Cornwall Hospital. "Surgical Don'ts." Third series.

WILLIAMS, TOM A., M.B., C.M.Edin. "On the Traumatic Neurosis."

WE have to apologise to our Irish readers for the inconvenience caused them last week by the delay in the delivery of our SUPPLEMENT. The delay occurred while the parcel was in the hands of the carrier, while the parcel was on its way to our office from the printers.

OMEN (Bath).—The sixteenth annual report of the Dundee Royal Victoria Hospital states that during 1915 the cancer wards had been practically full, and the deaths which had occurred in the hospital during 1915 presented a formidable number, which had not previously been attained. The incidence of cancer was strikingly in excess, and 20 of the patients had died from the disease.

SONA (Baldock).—We note that 38 doctors on the Herts panel list have enlisted.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, MARCH 8TH.

ROYAL SOCIETY OF MEDICINE (1 Wimpole Street, W.).—Occasional Lecture: Dr. Leonard S. Dudgeon will deliver a lecture on "Personal Experiences on the Gallipoli Peninsula and Eastern Mediterranean while a Member of the War Office Committee for Epidemic Diseases and Sanitation," in the Robert Barnes Hall, at 5 p.m. Lantern illustrations. N.B.—Members of all Sections are invited.

ROYAL SOCIETY OF ARTS (John Street, Adelphi, W.C.).—4.30 p.m.: Paper. Mr. C. R. Darling: Optical Appliances in Warfare.

HUNTERIAN SOCIETY (1 Wimpole Street, W.).—8.30 p.m.: Council Meeting. 9 p.m.: Paper. Dr. Langdon Brown: A New Treatment of Diabetes. Discussion invited.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.—5 p.m.: Hunterian Lectures. Professor J. E. R. McDonagh: Links in a Chain of Research on Syphilis.

FRIDAY, MARCH 10TH.

ROYAL SOCIETY OF MEDICINE (1 Wimpole Street, W.).—Occasional Lecture: Dr. M. Weinberg (of the Pasteur Institute, Paris) will deliver a lecture on "Bacteriological and Experimental Researches on Gas Gangrene" (with Epidiascope demonstration, Cultures, etc.), in the Robert Barnes Hall, at 5 p.m. N.B.—Members of all Sections are invited.

Vacancies.

Bethlem Royal Hospital, London, S.E.—Matron with housekeeping duties. Salary £120 per annum, with furnished apartments in the hospital, board, washing and uniform. Applications to John L. Worsfold, Clerk and Receiver, Bridewell Royal Hospital, London, E.C. (See advt.)

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Charlestown, co. Mayo; Harrow, Middlesex.

London Fever Hospital, Liverpool Road, N.—Assistant Resident Medical Officer. Salary £200 per annum, with residence and board. Applications to the Secretary.

Ingham Infirmary and South Shields and Westoe Dispensary.—House Surgeon. Salary £150 per annum, with residence, board, and washing. Applications to John Potter, Secretary, Ingham Infirmary, South Shields.

Royal Victoria and West Hants Hospital, Bournemouth.—House Surgeon. Salary £150 per annum, with board, lodging, and washing. Applications to Gordon M. Saul, Secretary.

The Guest Hospital, Dudley.—Assistant House Surgeon. Salary £120 per annum, with residence, board, and washing. Applications to the Secretary.

Royal Surrey County Hospital, Guildford.—House Surgeon. Salary £150 per annum, with board, residence, and laundry. Applications to the Secretary.

Bolton Infirmary and Dispensary.—Second House Surgeon. Salary £200 per annum, with apartments, board, and attendance. Applications to Albert E. Briscoe, Secretary.

Appointments.

MAYSTON, J. H., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Hackney District of the county of London.

MERRICK, W. J., M.B., Ch.B.Dub., Certifying Surgeon under the Factory and Workshop Acts for the Castleknock District of the county of Dublin.

COCHRANE, S. T., M.D.Durh., D.P.H., District Medical Officer of the Burton-upon-Trent Union.

GORDON, F. J., B.A.Camb., M.R.C.S., L.R.C.P., District Medical Officer of the Horncastle Union.

GRAVES, A. J., M.R.C.S., L.R.C.P., District Medical Officer of the Whitehaven Union.

HARRY, W. B., L.S.A., District Medical Officer of the Neath Union.

LEONARD, T. J., L.R.C.P. and S.I., Certifying Factory Surgeon for the Glaslough District, co. Monaghan.

NALLIAH, N. R., L.R.C.P., M.R.C.S., Assistant House Surgeon to the West Bromwich and District Hospital.

Births.

FOULKES.—On March 5th, at 62 Croydon Road, Beckenham, the wife of Peter Foulkes, M.B., Aveley, Purfleet, of a son.

LEA.—On February 25th, at Inglewood, Denmark Hill, the wife of Captain E. T. H. Lea, R.A.M.C., a son.

ORME.—On March 3rd, at Ampthill, Bedfordshire, the wife of R. Henry Orme, of a daughter (still-born).

PANCKRIDGE.—On March 2nd, at Petersfield, Hants, the wife of W. P. Pankridge, M.B., M.R.C.S., L.R.C.P., of a son.

Marriages.

PHILLIPS—GANBRILL.—On March 3rd, at the Parish Church, Edgbaston, Birmingham, Capt. Alfred Percy Phillips, R.A.M.C., third son of G. A. Phillips, Esq., J.P., of Hardwick Lodge, Streetly, to Norah, third daughter of N. S. Ganbrill, Esq., Brockley, S.E.

THOMSON—FREAM.—On February 29th, at St. James's Church, Paddington, W., Thomas Theodore Thomson, M.B., Ch.B., of the London Missionary Society, Jammalamadugu, South India, to Philippine, daughter of Ralph Fream, Esq., of Gloucester.

TOLLER—COURT.—On March 1st, at St. Peter's Church, Malvern Wells, Charles W. E. Toller, M.D., of Ilfracombe, only son of the late C. H. Toller, Esq., late Commissariat Dept., to Ella Milward Court, of Shelsley, Malvern Wells, elder daughter of the late Philip Wathen Court, of Tankatara, Port Elizabeth.

Deaths.

BERDOE.—On March 2nd, at 121 Bishops Road, Victoria Park, N.E., Dr. Edward Berdoe, in his 79th year.

BLASSON.—On March 2nd, of pneumonia, Thomas Blasson, M.R.C.S., L.S.A., of Billingboro', aged 81.

COLLINS.—On March 2nd, at Redstede, East Grinstead, suddenly, Charles Edward Collins, M.R.C.S.Eng., L.R.C.P.Lond.

MAXWELL.—On March 6th, after an operation, Richard Drummond Maxwell, M.D., F.R.C.S. (Dick), of 7, Devonshire Street, W., Junior Obstetric Surgeon to the London Hospital.

MOORHEAD.—On March 1st, at Kyrle, Batheaston, while on sick leave, Brevet Colonel A. H. Moorhead, I.M.S., A.D.M.S.

NICHOLLS.—On February 22nd, in India, from accidental gunshot wound, W. Howard Nicholls, Captain, R.A.M.C.

STANDERT.—On March 3rd, after a few days' illness, at 12 Montrell Road, Streatham Hill, S.W., Arthur Wyndham Standert, M.A., M.B., Corpus Christi College, Cantab., in his 69th year.

WATSON.—On March 4th, William Tyndale Watson, M.D., D.P.H., of Roslin, Grove Park, S.E., aged 76.

WILLS.—On February 28th, at Bexhill-on-Sea, Joseph Pearce Wills, M.D., aged 63 years.

WINTERBOTTOM.—On March 1st, at 1 Ella Road, Crouch Hill, N., Annie, second daughter of the late E. J. Winterbottom, of Sloane Street, S.W.

WORTH.—At Johannesburg, S. Agrica, Francis James Worth, M.D., of Winton House, Basingstoke.

THE MEDICAL PRESS AND CIRCULAR

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AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

A Circular.

THE Central Medical War Committee, having shown what it can accomplish in the way of offensive circulars is now apparently settling down to render itself ridiculous—a task which is well within its otherwise limited capacity. On page 592 of the *Lancet* of March 11th there appears the text of a circular which has been issued by the Central War Committee to canvassers. I am surprised and shocked that our grave, respectable and highly-esteemed contemporary should display such skittishness as to publish a circular which was clearly intended for *Punch*. The war is having a curious effect upon many, but no one ever supposed that it could move the *Lancet* to levity. It would have surprised me less to see an archbishop on a tight-rope.

Objections.

THE circular deals with certain "stock objections against enrolling" which the canvasser "may have to meet with brief answers." Thus: "*Objection* (a): I am physically unfit. *Answer:* That is no reason why you should not have your proper certificate of enrolment, which will be proof that you are willing to go if the War Office needed and would take you. *Objection* (b): I have financial liabilities which make it almost impossible to go. *Answer:* So have probably two-thirds of the men who enrol. *Objection* (c): I have a partner or assistant who is on military service; or I am doing work for a neighbour on active service. *Answer:* Enrol all the same. Your position is bound to appeal to the Central and Local War Committee when they decide who are the men who should be asked to go. *Objection* (j): I have special experience or qualifications, and I don't care to join unless *I shall be sure* (the italics are mine) they will be used. *Answer:* It is impossible to give a guarantee that every man will be used only in the special line to which he has been accustomed." These objections and answers are faithfully transcribed, but the answers are not complete. In each case, however, the quality of the whole, both as to wording and purport, may be gauged by the sample.

Pleasantry.

I DON'T know how the canvassers who are expected to purvey this sort of sweet reasonableness are likely to be dressed, but they would be well advised to don a steel helmet and some adequate protection for the gluteal region. The canvassee is not at the moment in a jocular mood, and however funny it might in ordinary circumstances appear to him, a medical man, to be told that physical unfitness is no barrier to military employment, that it will relieve his own financial liabilities to know that others have made sacrifices, or that a Central or Local War Committee is a better judge than he is as to whether he can be spared from his present employment, he is liable at present to regard such pleasantries as singularly ill-timed, and may easily be incited thereby to a form of badinage which is more vigorous than polite.

Pertinent.

BUT the reply to the very reasonable and most pertinent objection that the objector has special experience and qualifications is really the gem of this collection of comicalities. *Entre parenthèse*, I may be allowed to express the hope that the objector, when objecting, will express himself in English more grammatical than that which the Central Medical War Committee puts into his mouth. To say "that it is impossible to give a guarantee that every man will be used only in the special line to which he is accustomed" is the most complete confession of bungling ineptitude which could possibly be imagined. But it is typical of the British Medical Association and all its works. The public, naturally enough, regard all medical men as "doctors"; they cannot be expected to realise the enormous gulfs which separate the knowledge, experience, and efficiency of specialists in the various branches, not only from each other, but from what may be called ordinary medical practice. But the British Medical Association is fully cognisant of these distinctions, and the paramount importance of intelligent differentiation between doctor and doctor where military services are concerned ought not to be beyond the scope of its appreciation. And yet its reply to this very cogent objection it the typically Prussian "It is impossible . . . ."

Impertinent.

BUT what is it that is impossible? It is impossible to give a guarantee that a man will be given suitable work to do; that a surgeon will be given surgery; an oculist eye work; an anæsthetist, anæsthetics; a radiologist, X-ray work. These and other specialists have seemingly but one simple duty before them—that of delivering themselves bound hand and foot to the tender mercies of a committee of an Association which has ever been conspicuous for its jealousy of, and paltriness towards, experts and specialists. To dare to know more than your neighbour on any particular subject has always been a sure passport to the distinction of being belittled by this muddling mush of mediocrities.

In peace time that is a laughing matter, but in war time it is a serious one. The profession as a whole, and each man in it, is anxious to do the best possible under the trying circumstances; and what is the help or guidance which they are offered? Having, by some extraordinary *maladresse*, on the part of the War Office, succeeded in obtaining official recognition, this Committee immediately adopts the tone and language of the Jack-in-office. "Objections? Difficulties? Nonsense! Go and enrol!"

Credit.

THE circular says: "The credit of the whole profession is at stake in making this enrolment scheme a success." The credit of the profession is not at stake. The credit of the profession, always high where charity, loyalty and self-sacrifice are concerned, has been more than abundantly vindicated since the outbreak of war. Whoever else has faltered or failed, the doctors at any rate have been true to their traditions and have staunchly upheld the dignity and responsibility of their calling. The credit of the profession is not and never was in danger. And it never will be in danger unless and until it becomes confused in men's minds with the credit of the British Medical Association. The British Medical Association is, and has for years been discredited, and it is apparently seeking to rehabilitate itself by the curious expedient of brow-beating and bullying the members of the profession, and by mismanaging affairs with which it ought never to have been entrusted.

An Interview.

QUITE recently some dozen medical men representing various branches of the profession went as a deputation to the Central War Committee earnestly seeking to be enlightened about some of the important matters which are exercising the minds of many. The conference was not a success. If I am correctly informed, the questions asked by the visitors evoked more heat than light from the members of the Committee. The questions were definite, but they appear to have been met in the first instance by vague, high-sounding generalities, patriotism and belated balderdash of that kind; but when replies as definite as the questions were pressed for, the vagueness disappeared and the sound became predominant. Voices were raised, the table was thumped, but the stalwart dozen stood firm. The only answer which they seem to have elicited took the form of a peremptory order to each one to enlist at once under pain of being regarded and treated as a blackleg. Here, indeed, are courtesy, tact, and diplomacy, as these things are understood and practised at Potsdam.

Dissatisfaction.

IT is really high time that the Director-General took notice of the deep and growing dissatisfaction which the Central War Committee and its methods have created in the profession at large. I repeat that there is not a man in the medical profession who is not willing at whatever sacrifice to respond to the call of the country as expressed by the properly constituted authorities. If Sir Alfred Keogh and Mr. Tennant tell him he is wanted, every medical man of military age, or even of more than military age, will cheerfully do the work which is allotted to him. But the mouthpiece of these officials must be something other than this self-elected Committee of the B.M.A., which has succeeded in irritating everyone and in satisfying no one. The profession demands a body to whose judgment, impartiality, sympathy and loyalty it can pin its faith, a body in whose hands it can place its affairs with confidence that the interests of the profession at large and not those of the British Medical Association will be the first consideration.

The B.M.A.

WE have always contended in the MEDICAL PRESS AND CIRCULAR that work of this national character and serious import should be entrusted to a national and not to a sectarian body. We suggested the General Medical Council as a suitable authority, ready to hand. It was then pointed out that there were serious, and even insuperable difficulties in the path of such a scheme, and we were told that the British Medical Association, having the necessary organisation, and having obtained the necessary recognition, was practically the only available body. Now, it is perfectly obvious that the British Medical Association is quite unequal to the task which it has arrogantly assumed. In the full height of its wasting disease it was seized with the grandiose notions of the general paralytic; its speech became blurred, its vision impaired, its gait ataxic, its manners atrocious. The diagnosis is no longer in doubt. The pettifogging suburban attorney masquerades in the hired robes of a Lord Chancellor and persuades himself that he is a great and respected National Institution. And the devil of it is that he has managed to persuade others.

Substitute.

Now, it is quite obvious that this mockery and mummery must cease. The obvious difficulty of finding a suitable substitute should not be left to the Director-General to solve. He has already enough to occupy him. The difficulty, nevertheless, must be solved, and solved quickly, and I suggest that an *ad hoc* representative committee from the two Royal Colleges of Physicians and Surgeons of London for England should be appointed at once. Such a body would command the instant and complete confidence of the profession, and even if it did not immediately take over the work of the Central War Committee, it would act as a Court of Appeal from the ill-digested decisions and the clumsily expressed suggestions of the last-named. The Councils of the two Royal Colleges have an opportunity of saving the profession from a very real and pressing difficulty, and it is sincerely to be hoped that they will realise their responsibility. The appointment of such a committee would necessarily and inevitably be followed by official recognition, and its existence would bring a sense of peace and security to the profession as a whole.

Ireland and the Central Medical War Committee.

JUST as we are going to press, a letter has arrived from Dr. Maurice Hayes, the Secretary of the Irish Medical War Committee, enclosing some correspondence between himself and Sir Alfred Keogh. It is too long for insertion in this issue, but it will appear next week. I shall then deal fully with the subject to which it refers. In the meantime I wish to make it quite clear that my remarks concerning the English Central Medical War Committee have no reference to the Irish Medical War Committee, or to the body which acts in a similar capacity in Scotland. I have criticised the English Central War Committee, both as to its constitution and its methods. I have not referred to the Irish Central War Committee either directly or by implication. I know nothing about its constitution, and I am quite ready to believe that it brings to its task of recruiting, the good sense, the tact, and the sympathy which have been so conspicuously wanting in the body which sits at 429 Strand, London. It seems necessary to add, curious as it may seem, that I have never sought to discourage medical recruiting. My object has been to further it, and to that end I have ventured to suggest a change of personnel and method, not in Ireland, but in England, and particularly in London. SINAPIS.

OF BLOOD PRESSURE.

It is not so very long ago since the profession, as a whole, came to the realisation that the estimation of blood pressure was a clinical measure of considerable importance. In the beginning of its evolution skilful observers would record the impression given by the pulse to the examining finger, and a "hard" pulse was regarded as an indication for blood-letting. Sir Thomas Watson (1792-1882), in his celebrated "Lectures on the Principles and Practice of Physic," first published in 1843, says: "The quality of the pulse which bespeaks the necessity for bloodletting is hardness. The hardness is ascertained and measured by the resistance which the throb of the artery makes to your finger. The pulse is sometimes said to be incompressible; which means that although you apply your finger with considerable firmness, the blood still forces its way through the vessel beneath it." The first attempt at the instrumental, that is the accurate measurement of blood pressure, was made by Vierordt in 1855, and he was followed at various intervals by Von Basch, Marey, Potain, Riva-Rocci, Leonard Hill and George Oliver. "The history of the successive methods," says Janeway, "is a long one, not always free from rancour and jealousy, when a cherished instrument had done its best service in the unexpected way of suggesting a better one." That inventors should have their jealousies is not surprising, for that is the way in which they display their superiority over ordinary mortals. What is surprising is that there should be clinicians today who cling to and hold fast by the digital method of estimating blood pressure, and decline altogether to admit that a manometer can afford them any information which is not to be obtained by the primitive palpation of the radial artery. And yet such, alas! there be. But in spite of them the general practitioner has learnt to use the manometer; the handling, reading and interpreting of it are easy; it impresses the patient; occasionally, and often unexpectedly, it yields information of paramount importance. Like its forbear the sphygmograph, too much was at first expected of it, and there were puzzlements and disappointments leading in some cases to impatience and even abuse. It remains, however, and will always remain an instrument of precision, whose assistance no conscientious practitioner can afford to neglect.

There are various instruments on the market, all of which may be trusted for substantial accuracy. The selection is therefore a matter of taste and convenience. For portability the pocket instrument devised by Leonard Hill must be given the first place, but it has inconveniences which with many people outweigh this advantage. There are several spring instruments and many mercurial, some of which are portable and some suitable only for the consulting room. For very accurate observations, such as are necessary to physiological investigations, a mercurial instrument is said to be preferred. It is unfortunate that most of the good blood pressure instruments should still be rather expensive, but that is a matter which time alone can remedy.

The sensation of a "hard" pulse, especially if as well as hard the vessel seems small, is recognised as a direct invitation to the use of a manometer, but it is less often recognised that a loud, especially a clanging second sound at the aortic cartilage should remind the physician even more forcibly that an accurate reading is required. Nervous patients, especially when being examined for the first time or for life assurance, often present this noisy second sound, the real significance of which the manometer will readily reveal to the really skilled observer.

But the recognition and accurate recording of so-called high tension is by no means the only service which an efficient manometer may render to the practitioner. For even when he has discovered and measured a blood pressure which is above the normal limits he may be powerless to reduce it. He may even be foolish in attempting to do so. For high blood pressure may threaten the integrity of the arteries—in the long run it must do so—but there are even worse things than menaced vessels. If the conditions be such that in order physiologically to feed the medulla the general pressure must be raised, then the raised pressure cannot obviously with safety be reduced. With the medulla starved, or even for a moment deprived of its due share of circulating food, the whole machine drops inevitably and without hope of recovery into eternal silence. High tension is a potential danger, but really low tension is a present and pressing jeopardy. To reduce a high reading, as may easily be done with amyl nitrite, to what in ordinary circumstances would be a normal reading, may, in the circumstances be an extremely risky measure, for the high reading may indicate a defensive position deliberately adopted by the medulla; and the reduction, though it may look normal as measured in mm. Hg. may represent in reality a position of collapse, from which, if the patient is to be rescued, it can only be by raising the pressure which we have been at such pains to reduce. As Goodman puts it, "High blood pressure is often a necessary accompaniment of altered function and structure, and were it not for this raised blood pressure, life could not be carried on with these functional or organic changes." The manometer is now extensively used in assurance work, and it has frequently afforded the examining officer an excuse for loading a life which formerly his unaided clinical instinct incited him to load, for which recommendation he was nevertheless often at a loss for a reason which would satisfy his Board.

The manometer, helpful and even essential as it is, must nevertheless not be regarded as comprising all the law and the prophets. There are circulatory diseases of a very deadly description, forms of arterial degeneration, for example, in which manometer readings might easily lull the examiner into a false sense of security, for it would record neither hypertension nor hypotension. Like everything else in clinical medicine, it offers no royal road. It is an admirable servant, but an atrocious master. Its revelations must be seen in their due perspective with other findings, but to decline to profit by its assistance is no longer in consonance with the dignity of a self-respecting practitioner of the healing art.

CURRENT TOPICS.

Royal Edinburgh Mental Hospital.

We have received a copy of the annual report of the above hospital for the year 1915, being the one-hundred-and-third since the opening of the institution. It is a record of strenuous endeavour, of good work accomplished under serious difficulty, and reflects the greatest credit on the able physician-superintendent, Dr. G. M. Robertson, and his staff. The number of patients during the year increased from 800 to 889. The number of admissions was 462, of discharges, 238, and of deaths 135.

Referring particularly to the West House, which accommodates patients of the poorer class, Dr. Robertson points out that the number of admissions is almost exactly two-and-a-half times the average admission rate of the previous six years. This is entirely due to the magnanimous and public spirited offer of the managers to receive all cases of occurring insanity in the city of Edinburgh. By this means, Banjou Village Asylum was relieved, and set free to be converted into one of the largest and best equipped military hospitals in the country. To add to the difficulties of such a large increase, three out of four of the assistant medical officers have joined the forces, while nearly half the staff of matrons and assistant matrons have taken posts in military hospitals. The superintendent points out that as he has always selected for these important positions fully-trained hospital nurses, they were eligible for military posts. He pays a tribute to those officials left behind to carry on the arduous work of the institution.

An interesting point in the report is the statement that "there is a definite fall in the amount of insanity traced to alcohol as an exciting cause in the case of both men and women, the percentages being 10 for the former and 3 for the latter, the total being 6.3 per cent. This is decidedly below the normal, and if it be the case that there is increased drinking among women who receive separation allowances, it must be of such a nature that it does not tend to produce insanity. It is well-known that not occasional drinking bouts, but the habit of constant nipping is the form which is most deleterious to the nervous system." Dr. Robertson does not think that the war has increased the amount of insanity. Of soldier cases admitted, the majority had not been to the front. In a small number, alcoholic excess was assigned as the cause of insanity. Two types of insanity stood out prominently in the military cases. There was first a considerable number of cases of simple mental excitement or mania. It would appear that in these cases the excitement produced by their new environment and military duties, and the high tension under which they lived had overstepped the normal. They were perfectly lucid in intellect, but very exalted in feeling.

The second group of cases consisted of high-grade mental defectives. These men had passed the physical tests when they enlisted, and had answered the few questions addressed to them without displaying their mental deficiency. It was very soon found, however, that owing to their low level of intelligence they were quite unfit to be trained as soldiers or to realise their responsibilities. The physician-superintendent shrewdly observes that had the Mental Deficiency Act been in force for some years, no doubt they would all have been known to the authorities. Dr. Robertson pays a graceful tribute to the worth and work of his distinguished predecessor, the late Sir Thomas Clouston.

The whole report spells efficiency, and no greater tribute can be paid to the physician-superintendent and his staff than to express the belief that the work of the late distinguished head is being worthily carried on.

Doctors on Active Service.

The majority of the medical men in Partick and district have accepted a scheme for attending to the practices of their fellow practitioners who are on active service.

Each doctor going on active service appoints a representative to transact all business (financial and other) with the secretary. Where no special arrangements have been made by the doctor, his panel patients will be distributed by the Society according to locality. Private patients may make their own arrangements with any member of the Society for attendance which will be given on behalf of the doctor on service; and practitioners remaining at home pledge themselves not to accept patients of absent doctors as their own during the war, or within one year of the doctor's return, without his consent. Payments in respect of panel patients will be divided on the basis of 60 per cent. to the doctor on service, subject to the deduction of clerical expenses, and 40 per cent. to the acting doctor. Fees for private patients are to be equally divided, with the exception that the acting doctor shall retain the whole fee in the case of midwifery cases and miscarriages, administration of general anæsthetics, removal of tonsils, and like operations, lunacy and life insurance certificates, legal reports and court attendance, and notification of infectious diseases. Accounts will be rendered half-yearly by the acting doctor, who will make a half-yearly statement and settlement to the representative of the absent doctor.

Should the doctor die on service or be incapacitated, or remain permanently in the army, the Society undertakes to assist in the advantageous disposal of the practice. Each acting doctor will hand to the representative the list of panel and private patients he has attended, and in the event of patients of a deceased or disabled doctor desiring to retain the services of the acting doctor, the latter shall pay to the representative half the fees paid for work during the ensuing year, with the exception of those enumerated above.

Public Health of Middlesex for 1914.

The annual report for 1914 of Dr. C. W. F. Young, the Medical Officer of Health for Middlesex, includes also a summary of the annual reports of the District Medical Officers of Health in the county. The county is very populous. The area of the administrative county is 148,700 acres. By making necessary corrections a statistical population of 1,235,065 is obtained, and it is this figure upon which the various county rates are calculated. The number of births for the county in 1914 was 28,147, as compared with 27,719 and 27,576 in 1913 and 1912 respectively. This number is equivalent to a birth-rate of 22.8 per 1,000 persons living as compared with 23.0 and 23.6 in the two previous years. It is the lowest rate recorded since 1900. In 1901 the birth-rate was 28.1 per 1,000, and in 1904 it was 29.7, but since the latter date there has been a steady and continuous decrease. The decrease is not limited to Middlesex, but has been noticeable in the country generally. The birth-rates vary considerably in different parts of the county. The lowest—viz., 17.0 and 17.5—are recorded in the Boroughs of Hornsey and Ealing respectively, whilst the highest occurred in Brentford 28.0, Edmonton 27.4, Friern Barnet 26.4, and Tottenham and Wealdstone 86.0 each.

The corrected number of deaths is 12,564. In the three previous years, 1913, 1912, and 1911, the number was 12,405, 11,685, and 13,262 respectively. The death-rate for 1914 is 10.1. Compared with previous years it is lower than any rate since 1900.

The diseases which contributed to make up the total of 12,564 deaths were :—Heart diseases, 1,278 or about 1-10th; tuberculosis (all forms), 1,219 or about 1-10th; cancer, 1,190; pneumonia, 920; congenital debility, malformation and premature birth, 862; bronchitis, 838. Of the deaths from tuberculosis, 957 were registered as due to the pulmonary form, and of these, 633 were deaths amongst persons between the ages of 15 and 45 years.

The total number of deaths of children under one year of age, after correction, was 2,172, equal to an infant mortality of 77.2 per 1,000 children born. This is the lowest rate since 1900. Ever since the year 1906, when the rate was 121, it has steadily decreased, and has been below 100, except in 1911, when the rate was 119.

Neo-Biology.

This is from Carrick, where they breed men. An elderly naval man, grizzly bearded, with Bell's palsy causing his words to come out where his buccinator ought to be, but wasn't, spoke thuswise, of course in Doric.

"We're fearfully and wonderfully made: we irr that. But dinna rin awa' wi' the notion that natur' never makes mistakes. Noo, luk here, what's the sense in pittin' your shin-bane in the front o' your leg? It's fair, clottered nonsense. Ye see, it's always in front you get the dunts, like when you're rinning alang the deck at night. Wouldn't it be far mair sensible if the calf of your leg was in front? The saft padding wouldn't feel the blow. And there would be a heap less sweerin'.

"That's no a' eyther. Noo, jist look at a cat's face. It's no use whatever for catching mice. When a mouse gets into a hole the cat is fair on her beam-ends: she's stuck. But if she had a neb like a whaup (a bill like a curlew)." etc., etc.

The argument from design has not the grip on Covenanting Carrick that it had in the days of Sawney Peden.

The Severity of Typhoid Fever.

We have been accustomed to regard paratyphoid fever as a comparatively mild disease, rarely giving rise to serious symptoms or leading to a fatal result. So few, indeed, have been the recorded deaths that there has been little opportunity for *post mortem* research, and our knowledge of the pathology of the disease has been scanty. Fatal cases have, however, been observed, and in the current number of the *Quarterly Journal of Medicine,* Drs. Bertrand Dawson and T. H. Whittington give us a careful study of seventeen such cases which have come under their notice. Two were cases of infection with paratyphoid A, and fifteen with paratyphoid B. In severe cases the disease so closely resembled typhoid that a diagnosis could only be made by laboratory findings. The respiratory system suffered in nearly every case, in degrees varying from "congestion" to acute gangrenous pneumonia. The spleen does not appear to have been enlarged with at all the same frequency as in typhoid. The lesions found *post mortem* in the intestines seem to have been quite as severe as in typhoid, but the large intestine was more frequently affected than in typhoid. In three cases the appendix was gravely affected. As might be expected from the severity of the intestinal lesions diarrhœa was frequent, and hæmorrhage occurred in several cases. The observers noted a tendency to the formation of pus, abscesses of the spleen, of the liver, and of the lung being noted. It is clear that although paratyphoid is usually comparatively mild, it may reach to any degree of severity.

New Hospital for the West of Scotland.

Active steps are being taken to found a hospital somewhere in the West of Scotland for such soldiers and sailors belonging to the district as have lost a limb or otherwise been disabled. It is to do the same kind of work as the present hospital at Roehampton. It is meant to be directly under the control of the War Office and the Admiralty conjointly. That there is need for such an agency is evident from the fact that over a thousand names are on the waiting list for the Roehampton institution. The presence on the Committee of the names of Lord Provost Dunlop, the Marquis of Ailsa, the Marchioness of Bute, Sir William Macewen, Prof. and Mrs. Archibald Barr, Messrs. David McCowan, Reid and Yarrow, connotes business energy and professional knowledge ample to carry out the measure well and speedily. The Committee were sympathetically received by both military and naval athorities. Which is right, for this summer is certain, unhappily, to increase very largely the waiting list above referred to.

Pedology.

Study of our American contemporaries impresses us with the thoroughness of transatlantic treatment in the case of the subnormal, deficient, or hypoplastic child. Clinical manifestations which amongst us receive scant attention, or which, from continual occurrence, have come to be regarded as well-nigh inseparable from childhood, in the hands of these pedologists develop into phenomena of significance. From stuttering to skull deformity stretches a chain of infantile aberrations, all stigmata of a subnormal constitution, in the widest sense of this latter. Causation, in the opinion of these experts, appears to lie mainly in perversion of internal secretion. The treatment suggested, therefore, is organo-therapy, so far as drugs are concerned, but such plays a minor *role* in comparison with the ordering of the small patient's life. We read of prolonged sun baths, the eyes alone protected from the beneficent rays; of swimming in open pools, a similar procedure indoors being considered useless; of nights passed sleeping under the stars. This for the case of obscure ætiology. Congenital organic taints, such as lues, receive in addition their specific remedies. While finding nothing but praise for all attempts to mould child life to its absolute possibilities, we incline to regard such efforts as mainly symptomatic. They merely give the little human animal as an extenuation, what is surely his by absolute right of birth. The small boy, for instance, leading a normal life in proper surroundings, instinctively takes his swim and sun bath without any suggestion that he should do so. So long as overstrain and overcrowding, and absence of contact with the earth and the clear air encasing it is denied by giant circumstance to fathers and mothers, so long will they continue to produce the child which the Americans class as hypoplastic.

Presentation to Dr. J. Power, Ardfinnan.

We are glad to learn that the presentation to Dr. J. Power, to which we called attention some weeks ago, is receiving generous support. As we are sure that there are many others who would wish to subscribe, we would remind them that it is intended to close the list on the 25th inst.

ORIGINAL PAPERS.

THE BLOOD PRESSURE IN TYPHOID FEVER.

By J. D. ROLLESTON, M.D.

Assistant Medical Officer, Grove Fever Hospital, London.

HISTORICAL NOTE.

HUCHARD (10), in 1889, was the first to draw attention to the tendency of typhoid fever to cause a fall in the blood-pressure, and showed that this hypotension could be recognised in the absence of any special apparatus, not only by the dicrotism and compressibility of the pulse, but also by the weakness of the aortic diastolic sound and fœtal rhythm of the heart.

Alezais and François (1), in examination of 150 cases of typhoid fever with Verdin's instrument, confirmed Huchard's views, and showed that hypotension, which sometimes occurred at an early stage, might be present in mild or abortive attacks as well as in severe or moderate cases; while, on the other hand, very severe cases might retain to the end a relatively high blood-pressure.

Potain (14), who did so much to popularise the use of the sphygmomanometer in clinical medicine, laid down that typhoid fever lowers the blood-pressure more than any other acute disease. He pointed out, however, that the blood-pressure did not appear to bear any relation to the severity of the disease, as in a series of 116 cases the average blood-pressure of the fatal cases was about the same as of those who recovered.

Teissier (17) examined twelve cases in adults or adolescents with Potain's instrument. He did not find the irregularities of the blood-pressure at all extensive, but attributed the oscillations noted by Alezais and François to the character of their instrument. He concluded that a normal or raised blood-pressure in so regularly hypotensive a disease as typhoid fever was of bad significance, and indicated a complication or some pathological factor existing prior to the attack of typhoid.

Reynaud (15) examined 66 adolescent and adult typhoid cases with Verdin's instrument. Like Teissier, he found that far from presenting daily irregularities, the sphygmomanometric curve showed only slight oscillations in most of the cases which recovered. The highest tension he found coincided with the fall of temperature to normal, or sometimes preceded it by a few days. In convalescence the rise was always slow. Even after mild attacks, a large number of patients left the hospital between the 40th and 50th days without having regained their normal blood-pressure.

In fatal cases the terminal rise of the pulse-rate was always accompanied by extreme hypotension. In favourable cases the blood-pressure soon began to rise again, either as the result of treatment or spontaneously.

Durand-Viel (6) examined ten cases in children aged from 7 to 14 years with Potain's instrument, and found considerable hypotension even at the earliest stage of the disease. The older the child, the more marked was the hypotension. The blood-pressure remained low during convalescence, and only very slowly resumed its normal level.

Durand-Viel followed Potain in the view that there was no direct relation between the gravity of the attack and the fall of blood-pressure, as very low readings were found in quite mild cases.

Crile (5), in 1903, drew attention to the value of hypertension in the diagnosis of typhoid perforation. According to observation on 115 cases of typhoid fever with Riva-Rocci's instrument, the highest systolic pressure in uncomplicated cases was 138 mm., and the lowest 74 mm., whereas in 20 cases of acute peritonitis, five of which occurred in typhoid fever, the highest systolic pressure was 208 mm., and the lowest 156 mm.

Cook and Briggs (4) also found an early and striking rise of pressure in typhoid perforation and peritonitis during the period of peritoneal irritation, the hypertension being followed by rapid and profound depression.

Carrière and Dancourt (3) examined 41 cases in children with Potain's instrument. They found that moderate hypotension was the rule, but that hypertension sometimes occurred. Thus, three children had a pressure above normal throughout their disease, and in ten others, although the average blood-pressure was below normal, the tension at one time or another exceeded the normal.

A high blood-pressure was always met with one or more days before the occurrence of intestinal hæmorrhage, and fairly frequently accompanied pulmonary congestion, violent delirium, pericarditis, and sometimes myocarditis.

Weigert (19) examined 63 cases with Riva-Rocci's instrument. He found that the extent of the fall sometimes, though not frequently, depended on the severity of the attack. Hypotension was not entirely absent in mild cases. In severe cases which terminated favourably records as low as 72 mm. or 70 mm. were met with, apart from intestinal hæmorrhage or other serious complications. The rise of pressure in convalescence was very gradual, and subject to considerable oscillations, so that a normal blood-pressure was very seldom observed, in spite of a very long stay in hospital. Weigert did not attach any prognostic importance to the blood-pressure in typhoid fever.

Barach (2), in 1907, reported on 81 cases in which the records had been taken by the nurse four times daily with Stanton's sphygmomanometer. His main conclusions were as follows:—

(1) The blood-pressure falls from normal in typhoid fever after the patient has taken to his bed, stays down till convalescence is established, and then returns to normal.

(2) Typhoid is a disease with a pressure below 100.

(3) The diagnostic and prognostic value of the blood-pressure in typhoid fever is slight.

(4) No opinion could be given as to the value of sphygmomanometry as a guide to treatment in typhoid fever.

Koessler (12) (1913) examined thirteen girls and seven boys suffering from typhoid with Pachon's oscillometer, and confirmed the findings of her predecessors to the effect that typhoid fever was a definitely and strongly hypotensive disease. Though hypertension due to the fever might sometimes be met with at the onset, the rise was merely temporary, and only affected the maximum tension and

was constantly followed by a fall. The minimum tension always remained below normal. Recent monographs on blood pressure dwell on the importance of sphygmomanometry in typhoid fever. Thus, Faught (7) (1913) states that "daily estimations of the blood-pressure are an absolute necessity to the proper and intelligent conduct of a case of typhoid fever, and a chart should be carefully prepared and followed." G. W. Norris (13) (1914) also devotes several pages to the subject.

Considerable interest attaches to observations made on the blood-pressure of old typhoid fever cases. Thayer (18) (1904) examined the systolic blood-pressure of 189 persons whose attacks of typhoid had occurred at periods ranging from one month to thirteen years previously, and found that their average blood-pressure was uniformly higher than in healthy individuals who had never had the disease. Thus, whereas the highest record in 276 healthy persons was 180 mm., among the old typhoid cases there were 27 with a reading above 180, and 10 with a pressure of 200 or more. Another striking feature in Thayer's old typhoid cases was the frequency with which the radial arteries were palpable.

Similar observations on post-typhoid hypertension have recently been made by Groedel (9) (1915) with a "Tycos" sphygmomanometer on 275 convalescent typhoid soldiers at Spa in Belgium. One hundred and twenty-nine cases, or 46 per cent., showed hypertension, and only 37.5 per cent. gave a normal blood-pressure. Tachycardia was frequently associated with the hypertension, and also symptoms such as pain in the chest, palpitation, and shortness of breath. Groedel suggests that these symptoms may have been due to over-action of the thyroid gland in convalescence following the disturbance of its function during the acute stage of the disease.

As it will be seen from this *résumé* of the literature, considerable attention has been paid to the blood-pressure in typhoid fever on the Continent and in the United States, but no monograph, to my knowledge, has appeared on the subject in this country. The present paper is based on the study of 58 cases of typhoid fever admitted to the Grove Hospital in the course of the last two years (October, 1913—October, 1915). The clinical diagnosis in each case was confirmed by Widal's reaction. The blood-pressure was taken with C. J. Martin's modification of Riva-Rocci's sphygmomanometer. As in my previous studies of the blood-pressure in diphtheria and scarlet fever (16), the systolic pressure measured by the disappearance of the radial pulse was alone taken into consideration. As far as possible, the measurements were taken at the same time each day between 10.30 a.m. and noon—*i.e.*, from one and a-half to three hours after food. During convalescence, comparative observations were made on the different readings in the recumbent and erect positions. Apart from the early fatal cases, the total period of observation ranged in the severe cases from six to seventeen weeks, in the moderate from five to ten weeks, and the mild from four to nine weeks.

Age and Sex.

Table I. shows that all the patients except 14 below the age of 15 were adolescents or adults. The youngest was aged 2 years, and oldest 61; 39 were males, 19 females.

Contrary to what was noted in the sphygmomanometry of diphtheria and scarlet fever, in which there was no apparent difference in the blood-pressure of any two individuals of different sexes, but of the same age and suffering from attacks of equal severity, the tension of the females showed a decided tendency to keep at a lower level than that of the males.

TABLE I.

Years.	Males.	Females.
Under 5	1	0
5—10	3	1
10—15	5	4
15—20	6	5
20—25	8	4
25—30	6	3
30—35	1	0
35—40	3	1
40—45	2	0
45—50	0	1
50—55	3	0
55—60	0	0
60 and upwards	1	0
	39	19

Normal Blood-pressure.

As the blood-pressure of the patients prior to their attack of typhoid was not known, their readings must be compared with those recorded by other observers on normal individuals. According to Cook and Briggs, the normal blood-pressure of children up to the age of two years, as measured by their modification of Riva-Rocci's instrument, is from 75 to 90 mm., and of children above that age 90 to 110 mm. As regards adults, Fisher's (8) figures compiled from 19,339 records in two insurance companies may serve as a guide.

TABLE II.

Normal Blood-pressure in Adults.

Age.	Average Blood-pressure.
15—20 years.	119.85 mm. Hg.
21—25 ,,	122.76 ,,
26—30 ,,	123.65 ,,
31—35 ,,	123.74 ,,
36—40 ,,	126.96 ,,
41—45 ,,	128.56 ,,
46—50 ,,	130.57 ,,
51—55 ,,	132.13 ,,
56—60 ,,	134.76 ,,

Blood-pressure in Typhoid Fever.—Of the 58 cases under consideration, 54, or 93.8 per cent., showed for varying periods a subnormal pressure, as judged by Cook and Briggs' standard for children and Fisher's for adults. The four cases in which the blood-pressure was not lowered were all mild or moderate cases in children aged from 2 to 12 years. None showed any degree of hypertension in the acute stage, in convalescence, or in any of the complications of the disease.

Not only was the actual percentage of cases in this series showing a fall of blood-pressure much greater than that among my cases of diphtheria and scarlet fever, in whom it was 35.1 and 25 per cent. respectively, but the degree and duration of the fall were always much more pronounced. As will be seen below, the varying degrees of depression bore a direct relation to the severity of the attack. No less than 22 patients, or 45.8 per cent., who were discharged at periods varying between the 5th and 23rd weeks of disease, never regained the normal blood-pressure for their age while in hospital.

In every case the first reading was considerably the highest, probably owing to the emotion caused by the application of an unfamiliar instrument.

The course of the blood-pressure was progressively downwards, no rise being noted before hæmorrhage or at the onset of perforation, as observed by some writers. A slight rise might sometimes occur at the onset of a relapse or on the occurrence of certain complications (*v. infra*), but was always of short duration.

A comparison of the maximum pressures observed during the febrile period with those regis-

tered during apyrexia gave the following results. The record taken on admission in each case was excluded. Among 42 cases in whom these comparative readings were made, the maximum pressure in convalescence was higher than in the acute stage in 27, lower in 11, and the same in 4.

Out of 49 cases in which the blood-pressure was taken daily throughout their illness, in 42 it fell at some period below 100 mm., and remained above 100 mm. in 7 only, 5 of whom were vigorous young men aged from 21 to 29, 1 a gouty man of 38, and 1 an arterio-sclerotic man of 51. In only two cases, men aged 23 and 54 respectively, did the blood-pressure rise above 130—viz., to 140 and 144, in each case on one occasion only. In only three others, all males, aged 15, 23, and 29, did the blood-pressure reach 130. The extent of the fall below normal varied from 10 to 50 mm., and the duration of the fall ranged from periods of 20 to 60 days.

Apart from the fatal cases, the blood-pressure fell to 80 mm. or below in 16 patients, 10 of whom were children aged from 2 to 14 years, and 6 adolescents or adults aged from 17 to 41. The lowest record, obtained in a patient who recovered, was 70 mm., which was noted during a period of ten days in a boy aged 8 years during a relapse.

Classification of Cases.—According to the severity of the attack the cases were grouped in three classes—Class 1 "severe" (23 cases), Class 2 "moderate" (18 cases), Class 3, "mild" (17 cases). Hypotension was present in all the severe cases (100 per cent.), in whom it was also most pronounced; in all but one of the moderate cases (94 per cent.); and in all but three of the mild (82.3 per cent.).

Affection of the Blood-pressure in each Class.—Class 1: The hypotensive effect of typhoid fever was most marked and of longest duration in this class, in which every member was affected. The readings in Table III. may be regarded as typical.

TABLE III.
BLOOD-PRESSURE IN SEVERE CASES.

Age.	Sex.	Day of Disease on Admission.	Blood-pressure on Admission.	Subsequent Records.
42	Male	19th	130	110, 92, 90, 88, 78. Death from peritonitis on 32nd day.
24	Male	21st	104	94, 96, 90, 90, 60. Death from myocarditis on 41st day.
21	Male	13th	114	110, 104, 100, 90, 70. Death from hæmorrhage on 31st day.
17	Male	8th	106	98, 96, 94, 80, 96, 100, 94, 100, 110 on discharge on 72nd day.
41	Male	11th	100	92, 90, 88, 80, 76, 90, 120 on discharge on 79th day.
31	Male	13th	110	100, 98, 96, 90, relapse, 96, 100, 106, 102, 2nd relapse, 106, 110, 104, 92, 84, 80, 90, 96, 98, 102, 108 on discharge on 155th day.
49	Female	23rd	106	100, 98, 96, 90, 100, relapse, 102, 104, 106, 100, 90, 86, 84, 100 on discharge on 114th day.

Class 2.—The fall of pressure, though decidedly less than in Class 1, was still considerable. In only one case was no hypotension noted. The cases given in Table IV. are typical.

The greatest fall below normal noted in this class was 40 mm., the least 0, and the average 21.6 mm. The greatest difference between the highest and lowest readings in a given case was 30 mm., and the average 17 mm. In 8 cases, or 44.4 per cent., the blood-pressure was still subnormal on discharge from hospital between the 48th and 77th days.

TABLE IV.
BLOOD-PRESSURE IN MODERATE CASES.

Age.	Sex.	Day of Disease on Admission.	Blood-pressure on Admission.	Subsequent Records.
6	Male	9th	110	100, 98, 94, 80, 86, 88, 90 on discharge on 44th day.
17	Female	8th	90	80, 76, 80, 86, 88, 90, 92, 100, 114 on discharge on 41st day.
24	Male	19th	114	110, 104, 102, 100, 102, 104, 108, 110, 120, 130 on discharge on 61st day.
27	Male	6th	122	116, 110, 108, 106, 110, 100, 96, 100, 110, 122 on discharge on 51st day.

Class 3.—The blood-pressure was least affected in this class. Three, in fact, showed no hypotension at all. The greatest fall below normal was 30 mm., the least 0, and the average 16.8 mm. The greatest difference between the highest and lowest records in a given case was 22 mm., and the average 14.2 mm. In 6 cases, or 35.8 per cent., the blood-pressure was still subnormal when the last observation was made between the 31st and 53rd days. Table V. shows typical readings.

Date of Highest and Lowest Readings.—Owing to the difficulty of making a diagnosis of typhoid fever at an early stage of the disease, and to a reluctance to send cases to hospital before any other cause could be detected for the continued fever, comparatively few patients were admitted until the second week. Table VI. shows the date of admission in 48 cases in which the time of onset could be determined:—

TABLE V.
BLOOD-PRESSURE IN MILD CASES.

Age.	Sex.	Day of Disease on Admission.	Blood-pressure on Admission.	Subsequent Records.
12	Male	8th	104	100, 94, 100, 98, 108 on discharge on 41st day.
8	Female	10th	82	80, 80, 80, 78, 78, 90 on 46th day.
17	Female	15th	120	108, 100, 110 on discharge on 45th day.
23	Male	20th	120	116, 112, 110, 108, 116 on discharge on 52nd day.

TABLE VI.

Date of Admission to Hospital.	
1st week ...	4 cases
2nd ,, ...	23 ,,
3rd ,, ...	12 ,,
4th ,, ...	8 ,,
5th ,, ...	1 case
	48

In the great majority—viz., 35 cases, or 72.9 per cent., the highest readings were the first records taken. In the remaining 13 the highest records were not obtained until convalescence. In the great majority—viz., 51 out of 58 cases, or 87.9 per cent., the lowest readings were obtained before the end of the fourth week.

Except in three cases of relapse, the lowest readings were never found during the first week of the tever.

Comparative Readings in the Erect and Recumbent Positions.—The readings in the erect and recumbent positions in 44 patients in whom comparative observations were made were as follows:—In 6 the readings were the same, in 35 the blood-pressure was higher in the recumbent than in the erect position, and in 3 higher in the erect than in the recumbent, when the patient was first allowed to get up. Thus, in 41 patients, or 93.1 per cent., the reversal of the normal relations between the two records was found. The occurence of this so-called "hypotension of effort," which I have already illustrated in the case of diphtheria and scarlet fever, in whom it was found in 77.6 and 48.4 per cent. respectively, is another proof of the hypotensive effect of typhoid fever. It is also of interest that whereas in the diphtheria and scarlet fever cases the normal relation was finally established before the patient left hospital, in six of the typhoid patients the hypotension of effort persisted until discharge. The hypotension of effort is often associated with other signs of cardio-vascular depression, such as weakness of the first sound, tachycardia, cyanosis, and coldness of the extremities. As I pointed out in my paper on the blood-pressure in diphtheria, the practical significance of this hypotension is to indicate that resumption of muscular work in such patients should be gradual, and should be accompanied, if necessary, by the administration of cardiac and vascular tonics.

Effect of Relapses and Complications on the Blood-pressure.—The occurrence of *relapses* had little effect upon the blood-pressure. Of 12 cases in which they occurred, in 5 there was no change at all, in 5 their was a transient rise of from 10 to 14 mm., and in 2 there was a fall of from 4 to 10 mm. It is noteworthy that in 4 cases the blood-pressure rose from 2 to 10 mm. one to four days before the onset of the relapse.

Intestinal Hæmorrhage occurred in nine cases. With the exception of three cases in which the hæmorrhage was slight and no change in the blood-pressure took place, there was a marked drop varying from 18 to 30 mm. In none was there any rise of blood-pressure prior to the hæmorrhage, as noted by Carrière and Dancourt.

Perforative Peritonitis.—Only two cases occurred. In neither was there the rise of pressure noted by Crile and by Cook and Briggs, but on the contrary a decided fall.

Albuminuria.—Twenty-seven cases showed this complication, but its occurrence did not appear to influence the blood-pressure in any way.

Pleurisy.—A case which developed this complication three days after admission showed a slight rise of tension, which temporarily interrupted the usual downward course of the blood-pressure.

Myocarditis occurred in one case, which showed a drop of 30 mm. in 24 hours.

Of the complications which developed in convalescence—viz., otitis (3 cases), periostitis (2 cases), myostitis (2 cases), phlebitis (1 case), cholecystitis (1 case), none showed any influence on the blood-pressure except cholecystitis, which caused a rise ranging from 4 to 16 mm. for ten days.

A comparison of my results with those summarised in the historical introduction shows that my figures mainly confirm the investigations of previous observers.

The study of the blood-pressure in typhoid fever, as in other acute infections, adds to the interest of the disease, and is especially suitable for hospital practice, but it cannot be said to afford much guidance in diagnosis, prognosis or treatment. In this connection the recent pronouncement of Janeway (11) in a paper entitled "Important Contributions to Clinical Medicine during the past Thirty Years from the Study of the Human Blood-pressure," deserves to be quoted:—"In the early days of blood-pressure study, I, like most physicians interested in this field, hoped that it would furnish most important indications in acute infectious disease. That hope has been disappointed. I think that most of us must now agree with the conclusions of Kurt Weigert from his extensive studies of the acute infections, and which have been confirmed for scarlet fever by Rolleston, that the value of the blood-pressure measurement for prognosis in the acute infectious diseases is slight. It is an additional factor which is occasionally useful, as in typhoid patients with hæmorrhage, but for the most part the simpler observations made by our predecessors in clinical medicine of the facies, the tongue, the pulse, and the heart sounds, and the state of the nervous system, make the prognosis equally well without a knowledge of the blood-pressure curve."

Summary.

(1) In a series of cases of typhoid fever the blood-pressure was found to be subnormal in 93.8 per cent., the extent and duration of the depression being, as a rule, in direct relation to the severity of the attack.

(2) The blood-pressure of the female patients showed a decided tendency to keep at a lower level than that of the males.

(3) A considerable percentage (45.8 per cent.) of the patients who were discharged at periods ranging from the 5th to the 23rd weeks of disease never regained the normal blood-pressure for their age during their stay in hospital.

(4) In the great majority of cases the blood-pressure fell below 100 mm. at some period of the disease.

(5) In the majority of cases the blood-pressure was higher in convalescence than in the acute stage.

(6) In 93.1 per cent. of the convalescent cases the readings in the recumbent and erect positions were the same, or the recumbent was higher than the vertical record until convalescence was firmly established, this "hypotension of effort" in some cases persisting until the patient's discharge.

(7) The only complications which affected the blood-pressure were intestinal hæmorrhage and myocarditis, which caused a considerable fall, and cholecystitis and pleurisy, which were accompanied by a transient rise.

(8) Though not essential for the successful management of a case, sphygmomanometry furnishes interesting illustrations of the profound effect produced on the cardio-vascular system by the toxins of typhoid fever.

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HARVEY, DESCARTES, AND MOLIERE.*

By GEORGE PERNET, M.D.

IT is well known that the publication of Harvey's "Exercitatio Anatomica de Motu Cordis et Sanguinis in Animalibus" led to a great deal of virulent opposition on the part of the medical faculty. The circulationists and the anti-circulationists formed two contending camps, and, needless to say, the latter were far and away in the majority. But among the defenders of Harvey's ideas stood Descartes, one of the acutest thinkers of any time, and whose "Discours de la Méthode"—quite a small work, by the way—was destined vastly to influence philosophical thought and direct it into modern channels. René Descartes was born at La Haye, in Touraine, in 1595, and died at the age of 54, at Stockholm, in 1650. In his earlier years he travelled in various countries, as was the wont of those days, and took part in the siege of La Rochelle as a volunteer. I am indebted to a recent monograph by Professor Le Double, an anatomist of Tours, entitled, "Bossuet: Anatomiste et Physiologiste" (published in 1913), for the fact that Descartes paid a visit to England in 1631, not long, therefore, after the appearance of Harvey's *magnum opus* (1628), which revolutionised, slowly it is true, our conceptions of the blood-stream and its mechanism. It is probable that the French philosopher met the physician of Charles I. on that occasion, though there is nothing in the available correspondence of Descartes on the point. In any case, it was about that time that Descartes repeated Harvey's experiments and demonstrated them to friends in order to establish the truth of the new doctrine which so scandalised the medical and scientific world of that time. In his "Discours de la Méthode" (1637) Descartes refers to the circulation of the blood as ascertained by Harvey. In his second reply to Riolan, Harvey dwells on the support given to his doctrine by Descartes, to whom he refes as *vir acutissimus ingenio pollens*.

It may be asked how it came about that the great Bishop of Meaux, Bossuet—best known as the eloquent preacher of stately funeral orations—dabbled in anatomy and physiology. In the seventeenth and eighteenth centuries the Court, the Church, and the nobility and gentry (as runneth the advertisement) took an interest in philosophy, especially that which went by the name of natural philosophy, and medicine. In England we need only recall, in passing, the Hon. Robert Boyle, Sir Christopher Wren, and the Rev. Stephen Hales, who conducted scientific experiments. In the Church have we not also Berkeley, the philosopher Bishop of Cloyne, who was not above writing on the virtues of tar-water? But of him more another time. In "Le Malade Imaginaire" Molière satirically refers to the anatomical dissections and demonstrations which were attended by the great—by the Dauphin of France himself, one of whose masters was Duverney, the anatomist. Molière was fond of ridiculing the faculty, as we all know. His Diafoirus was Guy Patin, one of the most bitter opponents of Harvey and the "circulators." Molière puts in the mouth of Diafoirus the following words in praise of his son, who had written a thesis against the new ideas: "Sur toute chose ce qui me plaît en lui et en quoi il suit mon exemple, c'est qu'il s'attache aveuglément aux opinions de nos Anciens et que jamais il n'a voulu comprendre ou écouter les raisons et les expériences des prétendues découvertes de notre siècle touchant la circulation du sang et autres opinions de la même farine." But it must be remembered, according to Dr. Le Double, that Molière's landlord was Dionis, a doctor and a pupil of Duverney. Between them there existed a bitter "landlord *versus* tenant" feud, which, no doubt, was the cause of the shafts of satire, which the comic writer so frequently aimed at the medical faculty. It should be added that Dr. Le Double's work contains, *inter alia*, a portrait of Descartes; but there is a better one, to my thinking, in Professor Bayliss's "Principles of General Physiology," just published (p. 38).

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NOTE ON A NEW MEDIUM FOR PYELOGRAPHY.*

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IT is a commonplace that the time for diagnosis of a disease is when the earliest evidence of its presence can be found, and that the diagnosis should include not only the gross pathological fact but also those finer details—subsidiary, causative or secondary—which may influence treatment and prognosis.

In most regions of the body we find that classical symptoms indicate an advanced pathological process, so advanced in many cases that surgery becomes a palliative rather than a curative measure.

When hydronephrosis has developed to the extent of causing reactive or atrophic changes in the renal tissue the symptoms are clear, and the presence of a tumour waxing and waning with corresponding decrease and increase in the amount of urine passed renders the diagnosis definite. But such a diagnosis is of infinitely less value than one arrived at before such pathological changes in the kidney have taken place. I believe that a diagnosis of hydronephrosis can be made at an early stage of its development only by special methods, the chief of which is the injection of the pelvis of the ureter with a substance opaque to X-rays. By this means the position, form, size, and capacity of the pelvis can be determined more accurately than by any other method, and variations can be discovered before permanent pathological damage has resulted.

The suspicion of early hydronephrosis is, perhaps, the chief indication for injecting substances into the

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pelvis of the ureter, for the symptoms may be of a very vague character; the chief symptom I have personally come across has been vague pain in the right side, sometimes behind the renal region, sometimes in front and simulating the pain produced by chronic appendicitis, stone in the gall-bladder and Jackson's membrane. The most marked hydronephrosis of which I have a picture was sent to hospital with the diagnosis of tumour of the stomach. If the right kidney is movable in such cases, it is, I think, imperative to determine whether hydronephrosis is present or not before removing the appendix or rendering the ascending colon more mobile or more fixed or removing it. In the literature several cases are reported in which the appendix, ovary, ascending colon, and gall-bladder have received surgical attention, when the real cause of the pain was hydronephrosis.

Pyelography is not only indicated when hydronephrosis is suspected, but in many other conditions the photograph obtained gives useful data for the elaboration of a diagnosis. Amongst my own cases I have two of tumours in the right loin, both of which possibly had their origin from the right kidney. By injecting the pelvis and taking an X-ray photograph, the kidney was seen to be distinct from the tumour; at operation one case proved to be cancer of the hepatic flexure of the colon, and the other to be a chronic abscess of the appendix.

Pyelography may, on occasion, therefore, save a patient an exploratory laparotomy or an exploration of the kidney.

I might quote the indications for pyelography from Thomson Walker thus :—

(1) As a means of making a diagnosis of early hydronephrosis, and of determining whether a movable kidney requires operation or not.

(2) In order to determine the relationship of the kidney to any doubtful abdominal tumour.

(3) In cases of unilateral hæmaturia to determine whether there is a growth in the kidney, for such a growth would probably modify the form of the pelvis of the ureter.

(4) In order to establish the relation between a supposed stone in the urinary tract and the renal area.

For some years collargol, a colloidal silver preparation, has been used as the medium for pyelography. Although other substances have been tried, such as iodide of silver, nothing until recently proved so generally satisfactory as collargol. I have used it in several cases without mishap, and have obtained many satisfactory results.

Before the war collargol was expensive, and since then it has become almost unprocurable. For this reason I cast about for a substitute on the English and American markets, but failed to find anything but silver iodide, which, in my hands, did not give as satisfactory results. So I interviewed Professor Caldwell, of the Royal College of Surgeons, Ireland, asking him for a salt opaque to the X-rays, harmless to the kidney, and capable of being injected along a fine ureteral catheter into the renal pelvis. Professor Caldwell said he though he might be able to give me such a substance in the form of a bismuth compound. I pointed out, however, that various bismuth emulsions had been tried and failed, because bismuth became precipitated in the pelvis of the ureter, and might therefore form the basis of calculi. He told me that the preparation he would give me had never been tried, because it had never been made—that it would be of the consistency of milk, and that the whole amount would be washed out of the pelvis by the urine before precipitation could take place. I tried some of this in the case of a patient suffering from a vague pain in the right side, and obtained a picture of an early hydronephrosis. I used a 10 per cent. solution of the substance, to which the provisional name of Skirol is given. It gives a better picture than any I have obtained with collargol, it has not caused any irritation in any of my patients, and has given me much useful information.

Several fatal results have been recorded after the injection of collargol into the pelvis. In some cases it has penetrated into the substance of the kidney and formed areas of necrosis. This has occurred most often when strong solutions (25 per cent.) have been used, and it is possible that collargol is an irritant when it comes into contact with the renal tissue. It is, however, not irritating to the mucous membrane of the pelvis and ureter.

From its constitution one would not expect the bismuth preparation, Skirol, to possess any irritating properties, and I have certainly found none on using it. The fatal results of collargol were in all probability due to rupture of the calices, by injecting the fluid at too great pressure; it should be allowed to flow in by gravity, not injected by force.

In my experience Skirol disappears from the pelvis more rapidly than collargol—a fact I consider advantageous. Collargol has been found in the pelvis from one to several weeks after injection. I have had some cases X-rayed one or two days after the injection of Skirol, and have not found any shadow.

The *technique* is simple. The patient is brought to the X-ray room and placed on a couch; a catheter is passed into the ureter and up to the pelvis, the X-ray plate is adjusted, and everything got ready to take the photograph at the right moment.

The fluid is then allowed to flow from a syringe held not more than 12 inches above the level of the kidney into the ureteral catheter.

The patient is told to say when pain is felt in the kidney—at that instant the injection is stopped and the photograph taken. The fluid is allowed to run out, and the catheter removed.

SOME IMPRESSIONS OF THE REPORT OF THE ROYAL COMMISSION ON VENEREAL DISEASES.

By WILLIAM A. BREND, M.D. (State Med.),
Lecturer on Forensic Medicine, Charing Cross Hospital.

The Royal Commission on Venereal Diseases has carried through a most useful piece of work. It has collected information relating to these maladies from a large number of authorities, including medical men, statisticians, Government officials, and social reformers, and has set out this information in two large volumes of evidence, which form a most important compendium of knowledge on the subject. These volumes are really of greater value than the Report itself, and should be read in conjunction with the Report by all who associate themselves with the movement for the diminution of venereal diseases. The Report is also a valuable document, provided it be borne in mind that its authors did not consist of a body of exclusively scientific men directing their attention towards the elucidation of a scientific subject from an entirely unbiassed standpoint. The Commission consisted of some very eminent doctors, some of whom possessed strong views on the subject before their appointment, representatives of religious organisations, Government officials, and persons who have specially interested themselves in matters relating to women's welfare. The measures advocated, therefore, represent the views of a body of persons of very diverse character and experience, as to what can practically be applied to the community, regard being paid to considerations of moral and social importance besides those of a purely medical

nature. This is, of course, quite in accord with the object for which the Commission was appointed, and it is a tribute to the broad-mindedness of the members that they should have been unanimous in all their more important recommendations. Nevertheless, the inseparable association of moral questions with the prevalance of venereal disease, and the impossibility of arriving at unanimity on moral questions preclude the Report from being regarded as outside the domain of controversy, and already the opinion has been expressed that the Commission has failed to examine certain matters which may be of importance in reducing venereal disease.

THE PREVALENCE AND EFFECTS OF SYPHILIS.

The Commissioners have evidently and rightly been impressed with the magnitude of the evil, but it is doubtful whether this has been altogether an advantage, for it is impossible to read the Report and the evidence without gaining the impression that the Commissioners have painted an unjustifiably sombre picture, particularly as regards syphilis. It is true they point out that the statistical information is unreliable; nevertheless, they come to the conclusion that the number of persons who have been infected with syphilis, acquired or congenital, cannot fall below 10 per cent. of the whole population in large cities. It is impossible here to examine the evidence for this unexpectedly high estimate, but it does not seem conclusive. The figures were drawn mainly from not very satisfactory statistics relating to poor law, prison and asylum populations, but they were supplemented by special investigations undertaken by Sir John Collie, who found 9.36 of positive Wassermann reactions among 500 employees referred for medical report, and by Dr. Fildes, who found 8 to 12 per cent. of positive reactions among adult males, and 3 to 7 per cent. among adult females, in 1,002 patients and their friends who attended the London Hospital "for reasons wholly unconnected with syphilis." But neither of these can be regarded as typical samples of the whole population, and when the children are added, even allowing for congenital syphilis, it is difficult to see how the estimate of 10 per cent. is justified. Then the Commissioners say "infant deaths returned under 'congenital debility' and other headings are largely due to syphilis." But this is not at all in accord with the evidence of Dr. Stevenson, who pointed out that the distribution of infant deaths under the headings congenital debility and premature births is quite unlike that due to syphilis, and that whatever might be the number of deaths really due to syphilis, they were swamped by the very much larger number of deaths from other causes. Again, the Commissioners say that probably at least half the registered still-births are due to syphilis, referring for support to the views of Sir Thomas Barlow, Dr. Florence Willey and Dr. Frances Ivens. But admitting that the populations are not exactly comparable, Prof. Whitridge Williams found that syphilis was only responsible for 14 per cent. of fœtal deaths among white women admitted to the Johns Hopkins Hospital, and there is reason to think that other researches now in hand will show this to be the more accurate figure. It is perhaps unfortunate that the Commissioners should have taken any line which may give colour to the statement that they have exaggerated the extent and effects of syphilis, as in any case the evil is of sufficient magnitude to justify all the measures in the way of increased facilities for diagnosis and treatment which are recommended.

HAS SYPHILIS DECLINED?

The Commissioners, after examining the evidence relating to the prevalence of syphilis during the earlier decades, express their doubt as to whether there has been any reduction in the mortality justly attributable to syphilis in recent years. On the other hand, Dr. Stephenson, of the Registrar-General's office, was inclined to believe that there has been a genuine fall, and the reasons he gave for this view seem very convincing. The recorded mortality from syphilis shows a steady decrease, amounting to nearly 50 per cent. in the last 35 years. There is no doubt, of course, that the figures very substantially understate the actual mortality from syphilis, but there seems to be no reason to suppose that the error has varied much from year to year, and if it has not, then the statistics do show that there has been a very considerable fall. On this point, Dr. Stevenson pointed out that if the real incidence had remained constant, there are several important factors which would have made for a rise instead of a fall in the recorded deaths. In the first place there has been improvement in diagnosis, secondly, there has been a large increase in the proportion of deaths which occur in institutions, and these are much more likely to be accurately certified, and, thirdly, there has been a very large increase in the proportion of the urban population, and since syphilis is essentially a disease of large towns, this should have markedly increased the death rate. We may add to this the impression of nearly all the medical witnesses—many of them men of wide and long experience—that syphilis has shown a marked decline both in extent and virulence during the last two or three decades. It is not easy to see why the Commissioners should have hesitated to accept this view, supported as it is by the analogy presented by many other diseases which gradually wear themselves out in a community either by a process of widespread immunisation, or more probably, in consequence of a decline in the virulence of the infecting organism.

Associated with this question is the decrease in the number of recruits for the army rejected for syphilis, the rate having been 16.5 per 1,000 in 1873, 6.3 per 1,000 in 1890, and 1.4 per 1,000 in 1911-12. The Commissioners do not regard this as conclusive indication of decreasing prevalence of syphilis among the civil population, their reasons being that the signs of the disease are better known than formerly, and that men recognising these signs may not offer themselves as recruits; that recruiting sergeants, seeing that candidates are diseased, may tell them to get cured before presenting themselves for medical examination; and that there has been some confusion between soft chancre and syphilis. But as regards the first of these reasons, the signs of the disease to the non-medical affected individual are the same as they always were, and for the second it is difficult to believe that out of every thousand men, containing a dozen or so suffering from syphilis, who present themselves for enlistment, the recruiting sergeant is now able to detect all but one or two of the sufferers and send them off to be cured. Had the decline been slight, the reasons might have sufficed, but it is difficult to regard them as adequate, even collectively, to explain the great fall which has occurred.

The assessment of evidence is necessarily a matter of idiosyncrasy. Before I read this Report, I held the view, generally accepted I think among medical men, that there has been some decline in the virulence and probably in the prevalence of syphilis. The effect of reading carefully all the evidence, so far from leading me to the conclusion come to by the Commissioners, has been to strengthen my original view and induce the belief that the fall has been very much greater than I

had previously imagined. It must be pointed out that if there has been no decline in syphilis, then there is very little hope for the future. The Commissioners do not propose any new measures, but merely an extension of existing methods of dealing with the disease, such as increased facilities for diagnosis and treatment, greater instruction and warning of the young and so forth. Now while these services and influences are admittedly inadequate, they have by no means been non-existent in the past. Knowledge of methods of treatment has been steadily increasing, many parents warn their sons of the dangers of immoral behaviour, some teachers have private talks with their pupils, lock hospitals, general hospitals, rescue homes, leagues, associations of young men, etc., etc., have all been dealing with different aspects of the disease for many years, and if all these influences have had no effect in reducing the incidence of the disease in the past, we cannot expect their extension to have any greater effect in the future. If the Commissioners are right, we may well be pessimistic. If there has been a real fall, as I believe, we could have no greater encouragement to redouble our efforts and can look forward confidently to an eventual eradication of the disease.

Prophylaxis.

A question of great importance is that of prophylactic measures against venereal diseases. Several of the witnesses considered that such precautions have been or may be of great value. Mr. Frank Kidd, for instance, said that if every adult male were to be instructed in precautionary measures against gonorrhœa, and followed the instruction, the disease would be stamped out in a few years. A certain number of lay persons, he added, have already learned this method, and for this reason alone the disease is becoming slightly less common amongst certain classes. Similar methods have been encouraged in the Navy, and in the opinion of competent authorities have had a substantial effect in reducing syphilis among sailors. It is interesting to note that since 1911 the Board of Trade has been supplying medicaments for this purpose to merchant ships. The German soldier is compelled to adopt prophylactic treatment after risk of infection, and venereal disease in the German Army is remarkably low. These facts, collected from the evidence and appendices, are sufficient to show that a critical examination of the value of prophylaxis and a discussion of the arguments for and against popularising these methods would have been of great utility. But the Commissioners completely avoid the subject in their Report. One can only infer the motives for this course, and it is easy to believe that they found themselves in a position of some difficulty. The objection would certainly be urged against these methods that by making illicit intercourse safer they were encouraging immorality, and it was therefore undesirable that the knowledge should be spread. But to discuss the question in the Report at all, even if they came to an adverse conclusion, would actually have the effect of giving the very publicity that was not desired. Hence, one must presume that for this reason it was decided to ignore the question altogether. This attitude will be approved or not, according to views of morality held, but it was quite a sound attitude for a Commission so constituted to adopt. The point really illustrates the great difficulty already referred to of dealing with a question in which medical, moral and social considerations are so closely interwoven. Possibly events may show that the Commission has made a mistake in not boldly facing the difficulty, for now that public attention has been called so strongly to the whole question, the banned knowledge is almost certain to spread. Again, the Commissioners urge that warning lectures should be given in factories and workshops, but though the lecturers may carefully avoid this subject, they are certain to be questioned about it by individuals after the lecture. According to Prof. Blaschko's evidence, the German Society for the Prevention of Venereal Diseases has found itself obliged to include prophylactic masures in the instruction given to adult men, and it is possible that lecturers in this country might by force of circumstances be compelled to take the same course.

Prostitution and Syphilis.

Many facts of great interest are brought out in these volumes, but space precludes more than a cursory examination of a few of them. The Commissioners were quite unable to find out where habitual prostitutes obtain treatment for venereal diseases. The medical officers of lock hospitals, general hospitals and infirmaries were all closely questioned, but in every case they stated that prostitutes only formed a very small proportion of their patients. It is difficult to believe that these women do not get treated, for we should probably then see many more neglected cases about: nor is there any reason to believe that they go in large numbers to quacks. The view may be put forward that the "professional" prostitutes are really much freer from active syphilis than is generally supposed. The great reservoir of this disease among women is probably the class of girls engaged in shops and other occupations, kept women, and others who might be termed "amateurs." These become infected while young, and when they drift into the regular ranks have largely recovered from the active and infecting stages of the disease. Continental experience shows that venereal diseases are mainly spread by the young clandestine prostitutes.

Housing and Venereal Disease.

In their general conclusion the Commissioners say, "We are also conscious of the fact that overcrowded and insanitary dwellings indirectly contribute to the spread of venereal disease, and from improvements in this direction, we should expect some diminution of its prevalence." This is an interesting statement in view of the attitude and action of the police authorities towards prostitutes, which tends everywhere to drive them into the poorest quarters of the towns. Strong evidence to this effect was given as regards Dublin, by Dr. Meldon, representing the Royal Colleges and Universities of Ireland. He said "What has happened of recent years is that these poor, unfortunate women have been driven from pillar to post. Wherever they get a resting place, they are driven on, and the consequence is that they are now in the worst insanitary condition. They are practically living in any of the houses that will probably be condemned in a few weeks' time, and they are then driven from that to another, and they have no means of keeping themselves clean. . . A woman who has no chance of keeping herself clean very soon loses any shred of self-respect she has." Here, our social arrangements seem to have led to a vicious circle. In the interests of morality, we drive the women into the very quarters where, in the interests of health, they are least to be desired.

Incidence of the Cost of Treatment.

The Commissioners propose that free treatment for venereal diseases should be made available for all classes of the community, and that of the cost thereof, 75 per cent. should be met by imperial grants, 25 per cent. being raised locally. But it is clearly established that the incidence of venereal disease is very much higher in urban than in rural districts, hence the effect of paying 75 per cent. of the cost out of general taxation would be to impose

an unfair burden upon rural districts. In the case of Ireland, for instance, it would mean that all the rural part of the country which is extraordinarily free from venereal disease would pay for the sickness in Dublin and Belfast. There are several Acts under which we practically penalise healthy villages for the benefit of unhealthy towns. Sometimes this is justifiable, but it seems to me that in regard to venereal diseases a very strong case exists for requiring all the cost of treatment to be borne locally.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

IS GONORRHŒA A BLOOD DISEASE?

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The Royal Commission's Report on Venereal Diseases contains much illuminating matter, but it sets forth a couple of statements which will excite controversy.

It concludes that gonorrhœa, though a local disease at its inception, becomes, at least when long continued, a blood disease. Toxins are assumed to be absorbed into the blood from the gonococci, and, circulating therein, to give rise to a species of purulent polyarthritis, or gonorrhœal rheumatism. A further manifestation is a species of backache, or lumbago, due to the absorption of the toxins, which are supposed to affect the fibrous tissues of the back.

It seems to me that affections of the joints, and of the back, subsequent to gonorrhœa, have become more prevalent of late years. It is the fashion to ascribe every disease of whose ætiology we are ignorant either to a micro-organism or, if that cannot be found locally, to the toxin derived from it. Still, gonorrhœa has hitherto been held to be a strictly local disease, and one is not prepared to give up a favourite superstition without a protest.

The Report makes light of the chancroid sore, stating that the serious ones are generally the result of mixed infection. This is partly true, but one has seen undoubted chancroid followed by suppurating bubo which racked the patient with pain and exhausted him physically and financially, leaving him a helpless wreck in bed for weeks, and not a man but a malady—a huge suppurating sore for months after—and still no sign of syphilis. In fact, one often sees far more disablement and pain from chancroid than from either syphilis or gonorrhœa.

I am, Sir, yours truly,
J. C. MCWALTER, M.D., F.R.F.P.S.

Dublin.

VENEREAL DISEASE AND DIVORCE LAW REFORM.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The final report of the Royal Commission on Venereal Diseases is now before the public, and perhaps nothing in it is more significant than that it confirms and endorses the recommendations of the late Royal Commission on Marriage and Divorce on this subject. The more the social sores come under examination, the more evident it becomes how intimate is the connection between them and the present marriage and divorce laws, and how urgent is the need for their reform. This reform, so long overdue, cannot with safety to the nation be longer delayed, when we consider the many thousands of married women suffering from this terrible scourge, who, believing that they have no remedy, suffer untold agonies in secret, and go on producing tainted children, or are sterilised. The common mistake is too often made that women neither know nor think of these things. With the higher education, wider reading, and the growth and power of the woman's movement, women have come to look upon this question as one of the supremest importance to them, their offspring and the race, and it is good to see that a body of men and women have at last made definite and strong pronouncements, which cannot be ignored.

Perhaps now that the country needs new life, the British people will insist that their representatives in Parliament shall set about safeguarding the nation by making venereal disease a ground for divorce.

I am, Sir, yours truly,
MAY L. SEATON-TIEDEMAN,
Secretary.

Divorce Law Reform Union,
19 Buckingham Street,
Strand, W.C.

INFANTILE MORTALITY: THE POPULATION QUESTION.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Your excellent editorial paragraphs, together with Dr. Fothergill's suggestive letter, serve to keep this question to the front. It has been discussed fully in your editorial and correspondence columns on many occasions during the past thirty years. It has now gained wider consideration than ever before in consequence of the exposure of fundamental facts by the present war. Never before has there been made so glaringly visible the fact that these islands in the matter of population must be looked upon as the motherland of our vast empire; and never before has there been so clearly exposed the false position of the band of zealots or fanatics who have in late years gone about preaching the doctrine that restriction of population is the one sole remedy for most of our graver social maladies. These people have taught virtually that these islands form tight compartments from which no overflow of population is possible and that therefore it becomes merely a question of time when want and famine shall result from the overcrowding. They have not been able to recognise the extent of our vast Dominions and Colonies, which, not to speak of India and Burma, contain lands with untouched virgin resources suitable for British settlers in extent as great as three Europes. They forget that vast areas of sub-tropical and tropical lands have, thanks to medical science, now been made habitable by Europeans, and where, as, for example, throughout Central Africa there exist table-lands and hill-country, the climates are the most splendid in the world. These remarks apply to the lovely islands in the West Indies and those in the Pacific, some of which latter of great size we have lately taken from the Germans. We have also just taken German S.W. Africa, and there can be no doubt that German E. Africa is now falling into our hands. Besides these additions to our Dominions we shall probably have a share of the Cameroons and the other forfeited German colonies—lands in extent equal to two or three times the British Islands. It is evident that if extensive infantile mortality could be put an end to—as it surely can be—if the general death-rate could be further decreased; if the marriage-rate were to be increased, and if no undue restriction of the family were practised, there would still be room within our Empire for the whole of our surplus during at least some

hundreds of years. Our Dominions and Colonies are crying out for population, and there can be no doubt that one result of the closer union of the Empire, which this war is bringing about, will lead to the formation of an Imperial system of emigration, through which our increase will be distributed throughout the lands where they are most needed and paternally guarded there till established. The task before us at home is to raise the level of our lower strata so that they may be physically and ethically fit to act their part as empire builders. Science has now given to mankind the power to mould as they please their physical, moral and ethical future; but it must be true science, and the science must be directed by leaders inspired by true morality and really high ideals. Germany is showing us what is the result of science applied to national development when unguided by true morality. The end of the war is coming; a small ray of light is now visible on the dark horizon, which must slowly or quickly widen out until the sky becomes fully illumined by the dawn of peace. In the work of social regeneration, the fruits of which can alone offer any compensation for the vast mass of human anguish and misery which the war has inflicted, the medical profession will have the opportunity of taking the lead—they will not surely fail in this duty.

I am, Sir, yours truly,
A Student of Sociology.

March 11th.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF MEDICINE

Meeting held Friday, February 4th, 1916.

The President, James A. Lindsay, M.D., F.R.C.P., in the Chair.

EXHIBITS.

CASE FOR DIAGNOSIS.

Dr. Nesbitt exhibited a young man who had complained for the past eight or nine months of increasing shortness of breath on exertion and swelling of the abdomen. A large, painless, and non-tender mass was found, apparently connected with the liver, irregularly rounded and semi-elastic, giving no percussion thrill, and moving freely with respiration. There was considerable cyanosis and venous congestion of the face (but not of the arms), which were much aggravated by stooping. On X-ray examination a very broad heart shadow was revealed, with masses about the root of the lung, and some evidence of scattered pulmonary fibrosis. The urine and blood were normal; Wassermann test negative. The difficulty in diagnosis lay mainly in trying to group such diverse findings under one heading. He considered the liver condition either hydatid cyst or a large angeioma, and was forced to conclude that the pressure signs in the thorax were due to some independent factor—*e.g.*, mediastinal glands.

ACUTE GENERAL TUBERCULOSIS, WITH LEFT OCULO-MOTOR PARALYSIS, AFTER MEASLES.

Sir John Moore reported the case of a little girl, aged four and a half years, who had measles nine weeks before her admission to the Meath Hospital on January 5th, 1916. Her attack was followed by "broncho-pneumonia," and suddenly and finally by complete paralysis of the left oculo-motor nerve. On admission, the axillary temperature was 96° F., the pulse rate 86, and the respirations 28 per minute. The child was conscious and intelligent. She answered questions more by gestures than by speech. Her tongue was thickly coated. There was complete paralysis of the left third nerve. The fourth and sixth nerves seemed to be unimpaired in power and function. Dr. Euphan Maxwell examined the child's eyes on Saturday, January 8th, and again some two days later. Her report ran as follows:—

"O.D.—Pupil dilated and immobile; muscular movements apparently normal (external).

"O.S.—Complete third nerve paralysis.

"Ophthalmoscopic Examination: — O.D. — Chorioid very thin; disc apparently normal, except for some congestion of the inferior veins.

"Examination of the left fundus:—Disc somewhat pale. I could detect no congestion. Isolated patches of chorioiditis. Chorioid very thin as in O.D."

Dr. Maxwell suggested congenital syphilis as a possible cause of the condition, but there was no history to point in such a direction, and the diagnosis, already arrived at, of tuberculosis, was adhered to. The child's strength failed rapidly. Vomiting set in, and finally complete unconsciousness ended in death on January 15th. Dr. Brontë, pathologist to the hospital, furnished the following note as to the *post mortem* findings:—"Disseminated tuberculosis of both lungs and also of the mediastinal glands. Very profuse tuberculosis of the pericardium, diaphragm, liver, kidneys, spleen, and pritoneum. Extensive basal meningitis."

The question as to the exact cause of the pronounced left oculo-motor paralysis must remain unsolved. After hardening, a detailed histological examination of the nucleus of each third nerve was made by Dr. Brontë, but no evidence of direct tuberculous mischief was forthcoming at that point or in the intra-cranial course of either oculo-motor nerve. As the left eyeball was not removed, it was not possible to state what was the condition of the corresponding oculo-motor nerve in the orbit, or within the area of its final distribution.

Dr. Little thought that the child was probably on the eve of a tuberculous outbreak before she contracted measles. In his early experiments with guinea-pigs he had noticed an invariable infection of the bronchial and mediastinal glands in the animals which died of tuberculosis, and he had constantly observed the same association in autopsies on cases of tuberculous meningitis.

Dr. Euphan Maxwell said that the signs in the left eye—namely, complete third nerve paralysis and commencing optic atrophy—were obviously due to the pressure of the exudate at the base of the brain. The patches of chorioidal atrophy in the left eye probably marked the site of previous metastatic tuberculous inflammations. The thinning of the chorioid in both eyes was possibly a congenital abnormality, and had no bearing on the case. The signs in the right eye—namely, internal third nerve paralysis and slight congestion of the inferior veins at the disc margin—were probably also due to basal pressure. Although theoretically the involvement alone of this small portion of the third nerve, in which also ran the fibres to the inferior oblique, seemed strange, it would seem that clinically it was not uncommon.

NOTES OF A CASE OF CHYLURIA.

The President read notes of a case of the above, for which see Medical Press and Circular, March 1st, p. 192.

Dr. Walter Smith said this condition was one of the rarities as well as mysteries of medicine. He showed a specimen of urine which he had had in his possession for a number of years, and which still retained its original characters. Fat in the urine in minute quantities was a common occurrence—*e.g.*, fatty casts. Lipuria was also common in certain animals, such as the dog and cat. There was, however, no real connection between lipuria and chyluria. In chyluria the fat was present in a very fine emulsion, and the condition was independent of diet. It had been observed in very diverse conditions—for example, pregnancy and cancer of the stomach. In lipuria the fat occurred in more massive form, and did not remain in emulsion. Lipuria had been found in obesity, diabetes, hæmatoporphyrinuria, etc. A third very interesting form in which fat might be found was as liquid crystals, which could be differentiated only by means of polarised light.

Dr. Peacocke referred to a case of lipuria formerly under his care, in which the condition seemed to have been brought about by taking a preparation of liquid paraffin. When this drug was stopped the lipuria ceased, but started again when it was resumed.

Dr. Bewley said he had a case of chyluria some years before in which the urine was exactly similar to the specimen shown. On some occasions the urine solidified into a jelly in the vessel in which it was placed. He had found all forms of treatment quite useless.

Dr. Rowlette mentioned a case the urine of which he had examined on several occasions at the Rotunda Hospital. The patient was a negress who had never been abroad. She was in good health otherwise.

The President, in reply, said he thought it a mistake to give a fatty diet, as had been recommended in several text-books. His patient was a strong, vigorous man, and he advised abstention from fat and reduction of exercise.

SPECIAL REPORTS.

MEDICAL ANTIQUITIES.

Dr. Dorveaux has lately published in the "Bulletin des Sciences Pharmacologiques" an interesting account of the *Oath of the Christian Apothecaries, fearing God*, which has been compared to the "Hippocratic Oath" of physicians.

This oath was supposed to have been first used in the reign of Philippe de Valois in 1336, but Mr. Dorveaux shows that it was composed in 1608 by Jean de Renon, Counsellor and Physician to the King. It is naturally couched in old French, and the following is its equivalent in modern English:

"Oath of the Christian Apothecaries, fearing God."

I swear and promise before God, Author and Creator of all things, Unique in Essence and distinguished in Three Persons, everlastingly blessed, to observe in every point the following articles:

And first I swear and promise to live and die in the Christian Faith.

Likewise to love and honour my father and mother to the best of my ability.

Likewise to honour, respect and render service as far as I am able to do, not only to Doctors and Physicians who have taught me the knowledge and precepts of Pharmacy, but also to my Preceptors and Master Apothecaries, under whom I have learnt my profession.

Likewise, never to speak disparagingly of my old Teachers and Master Apothecaries, or anybody else.

Likewise, to do all that in my power lies to increase the honour, glory and majesty of Medicine.

Likewise, never to divulge the secrets and mysteries of Medicine to idiots and unworthy persons.

Likewise, never to undertake anything rashly without the advice of a Physician, or for filthy lucre.

Likewise, never to administer purgative remedies to patients suffering from acute maladies without first seeking counsel from some learned Physician.

Likewise, never to uncover the sexual organs of a female unless it be absolutely necessary, that is, for the application of remedies.

Likewise, never to betray any secrets which may have been confided to me.

Likewise, never to administer poison to anyone, nor to advise anyone to have recourse to it, even for their greatest enemies.

Likewise, never to administer any abortive potion.

Likewise, never to attempt the removal of the fruit of the womb, except by order of a Physician.

Likewise, to execute faithfully "secundum artem" all prescriptions of Physicians without adding or subtracting anything.

Likewise, never to substitute any drug without first consulting some wiser person than myself.

Likewise to disown and to shun like the plague the scandalous and totally pernicious practice of empirical charlatans and alchemysts, who carry on their trade to the greater shame of the magistrates who allow them to do so.

Likewise, to always give aid and succour to such as need my services.

And, finally, never to keep worthless and obsolete drugs in my shop.

May the Lord continue to bless me as long as I observe these things.

TORQUAY AS A HEALTH RESORT.

Torquay, from its situation, is eminently suited for the cure of invalids; being built on a series of hills overlooking the sea, it is possible to get almost any aspect suitable to individual cases. Owing to its situation it enjoys probably the most equable temperature in England. With a mean winter temperature of 44.7° and a mean summer temperature of 55.7°, it will be found to average higher in the winter and lower in the summer than almost any health resort in this country. In 1912 the meteorological report issued by the Borough of Torquay gives a maximum and minimum mean temperature for January at 44.2°, and for August 57.2°; whilst the maximum shade temperature on the hottest day for twenty-five years up to 1909 was 79.9°, which has only been exceeded twice since: the maximum at highest being 83°, at a time when there were several resorts in England with a maximum of 97° and 100°.

Summer visitors are often astonished to find Torquay much cooler than their homes in Yorkshire and the midlands. From the foregoing it will be seen that from its temperature Torquay should be classed as a summer as well as a winter resort. It has for many years been popular as a winter resort, and has a great reputation in the treatment of lung disease, in chronic bronchitis, in invalids recovering from acute lung disease, and in a large number of patients with early phthisis the cure of these conditions being due to the equable temperature, the excellent drainage due to the limestone soil and

the slopes of the hills, both conducive to rapid drying of the streets after the heaviest rainfall.

The invalid is better catered for than in past years. Not only has the hotel accommodation increased, but there are more amusements. The Pavilion, opened a few years ago, is supplied with an excellent orchestra, and the programme of music is of the best. Motors have made it easy to visit the numberless beauty spots on Dartmoor and neighbourhood.

Within a very short period the Torquay Council will have opened their new bathing establishment, which will provide a variety of invalid baths and a large sea-water swimming bath. There is also already in the town provision for those invalids requiring different forms of electrical treatment.

The water supply of the town is excellent. It is probably unequalled for softness and freedom from contamination of any sort; any invalid who wishes for a water free from calcium salts cannot do better than drink it at Torquay.

Patients who require a bracing climate will find a great difference in Babbacombe, which is only a mile from Torquay. It is placed high on the cliff with a N.E. exposure, looking out as it does on the Exmouth to Portland coast. A decided asset to this health resort is the splendid service of express trains run on the Great Western system, whereby the 200 miles journey from or to London are run in four hours; equally fast services being maintained from the Midlands, Yorkshire, etc., via Exeter.

OBITUARY.

Dr. R. D. MAXWELL, M.D., F.R.C.S., LONDON.

The death occurred on March 6th, after an abdominal operation, of Dr. Richard Drummond Maxwell, assistant obstetric physician to the London Hospital. He traced his descent from an old Scottish border family. He had a strong regard for Scotland's ancient ally, France, and he always evinced interest in military matters. Educated at the London Hospital, he graduated M.B. London in 1897 and M.D. in 1904. In 1907 he took the F.R.C.S. Eng. In the S. African War he acted as civil surgeon. He was elected physician to Queen Charlotte's Lying-in Hospital, and later became assistant obstetric physician at his old hospital, where he was also lecturer on midwifery to nurses. He wrote largely on his speciality and edited the new edition of "Diseases of Women," originally written by his old chief, the late Dr. Herman.

A man of great ability, Maxwell has died while practically only on the threshold of a great career. He was deservedly popular with his colleagues and students, and will be deeply regretted by a wide circle of friends.

SURGEON-GENERAL LANDALE, M.D., L.R.C.S. Edin.

As the result of an accident, Deputy Surgeon-General James Landale has died at Dunboyne, Cheltenham, in his 80th year. While on his way home, General Landale was misled by the darkness into entering the gateway of the house next to his own. In endeavouring to retrace his steps, he fell, and was later found by his wife lying on the public footway. He was apparently uninjured and seemed to recover from the shock, but passed away during the night.

General Landale qualified M.D., L.R.C.S. Edin. in 1856. He entered the army in 1857, served in the Indian Mutiny campaign as officer in charge of medical quarters of the 99th Foot. He retired in 1890. He leaves two sons, both officers in the Indian Army, and now serving in Mesopotamia.

Mr. Heighway Jones, of Salop, left £100 to the Salop Infirmary.

REVIEWS OF BOOKS.

SLEEPING SICKNESS IN THE ISLAND OF PRINCIPE. (a)

The significance of this well-produced volume does not lie merely in its narrative, although this is of great interest. As will be seen from a "Translator's Note" enclosed as a leaflet (its importance demands that in any future edition of the book it should be included as a foreword), the book is really a plea for justice to Portugal. Colonel Wyllie, the translator, in a statement possessing a brevity and lucidity not always present in military despatches, relates how the Teutonic tentacle nearly closed round Principe. The story, which sheds a new light on the Congo Reform question and the agitation over the San Thomé slavery, cannot be reproduced here; but could Shakespeare's Antonio have beheld Germany, stained with a record of ill-treatment of natives "quite as ruthless in brutality as anything established against the Belgian Congo *régime*," tenderly pleading the cause of the alleged ill-governed inhabitants of San Thomé and Principe, he would have assured Bassanio with a still stronger conviction that "the devil can cite Scripture for his purpose," and would have exclaimed yet more bitterly, "O, what a goodly outside falsehood hath!"

As we read this "Record of Four Years' War against Sleeping Sickness in the Island of Principe," and discern between its lines the skill, pertinacity, endurance, and devotion of the four men waging the warfare, we cannot avoid the feeling that the present world-struggle would be further advanced had our cause been marked by the same admirable adaptation of means towards ends, the same grasp of situation, and, the British taxpayer will ruefully add, the same economy.

Thanks to the translator, who adds to clear diction a system of cross-heading and paragraphing that makes the narative more readable than an ordinary novel, we are carried step by step through the campaign with never-flagging interest. The sanitary history of the Island (herein we read that some 25 per cent. of the total population was found to be infected with the trypanosomes in the period 1907-1911; this fact alone indicates something of the task which confronted the dauntless four); its physical characteristics with the flora and fauna; the Glossina; the War and its Results; the Sanitary Future of the Island—all are fully treated of, yet never tediously, and the book concludes with a detailed study of the typanosomes, etc., concerned. As an example of the ingenuity employed, reference may be made—considerations of space alone prevent many other such references—to page 103, "Use of a Viscid Paste to Trap the Fly," a story not without an element of humour. This paste was spread on a cloth of dark colour and worn on the backs of a certain number of contracted labourers, the glossinæ settling freely on the paste. So much did this contribute to the eradication of the fly, that we find that whereas in 1911 nearly 204,000 were trapped by this means, the number of flies on the island in 1914 had so decreased that only 34 were caught, although the number of catchers employed had risen. All this was but one phase of the activity of the "Official Sanitary Brigade," organised in 1911, and at first composed of 43 men only, "all prisoners of war and delinquents sentenced to penal servitude"! Even up to March, 1913, the strength was only 100, increasing to an average of 300 from February, 1914. Other steps were the clearing of jungles, the draining of swamps, the extermination of fauna harbouring the trypanosomes or even "suspect" of doing so (even 2,000 civet cats being done to death, although no evidence existed that they were guilty of being carriers), the killing of all infected animals, and the injection of atoxyl into all infected inhabitants until repeated examinations showed the absence of trypanosomes from the blood. Thus did our Ally translate into action Mr. Kipling's "Song of the English":

(a) "Sleeping Sickness in the Island of Principe." Pp. xii, 260; plates, 70 plain and 5 coloured; 3 coloured maps. Royal 8vo. London: Bailliere, Tindall and Cox. 1916. 7s. 6d. net.

"Keep ye the Law—be swift in all obedience—
Clear the land of evil; drive the road and bridge the ford.
Make ye sure to each his own,
That he reap where he hath sown."

Indeed, this last line may be quoted with special aptness, considering the bearing of all this work upon the agriculture of the island, so severely threatened by the malady fought against. From page 123, we find that Portugal, whose reputation has been so industriously blackened by her huge enemy, spent in one half-year alone (1914) nearly $157,000—say, over £30,000, in this righteous war. Severely restrained though the tone of the narrative is, we cannot but think that the authors must have begun the third part with the heading of the first section as "Disappearance of the Glossina from the Island," with a touch of entirely justifiable pride.

The translation, as we have said, is most easy reading, although on page 5 the translator speaks of the "autochthonous" population; surely "aboriginal" would serve. English readers would have been grateful to him if he had, at some little trouble, translated the foreign measures, etc. It is difficult to think in terms of hectolares, kilometres, and degrees Centigrade. This has evidently occurred to him, for he converts in one place a sum of Escudos into English money. On the other hand, an excellent glossary is prefixed. It It would also have been very serviceable if the coloured plates and maps at the end had been bound in with blank inner leaves, to allow of pulling out for reference when reading the pages to which they refer, while the magnification has not been stated in the trypanosome plates.

The 70 photographs are beautifully printed; we do not remember to have seen photographs so well reproduced on paper which is not sized or glazed: the various landscapes, etc., are a continual artistic delight. We cannot conclude without making mention in honour of the four leaders in the war, whose successful labours are recorded: Drs. B. F. Bruto da Costa, J. F. Sant' Anna, A. C. dos Santos, and M. G. de Araujo Alvares.

PHARMACOLOGY. (*a*)

WE are reminded in the preface to the sixth edition of this comprehensive text-book on the action of drugs in health and disease that "the insistence on numberless preparations of drugs of questionable value has discouraged interest in therapeutics." It is, of course, true that even the new "British Pharmacopœia" contains several remedies that are comparatively seldom used by medical practitioners, whereas other old friends are not to be found within its pages. Nevertheless, the individual prescriber will still continue to be influenced in his choice of drugs by experimental work and by careful observation and comparison of the experiences of investigators in the field of pharmacology. In deciding what remedy shall or shall not be retained in any official list much depends upon the degree of success that has been obtained with it in the hands of those responsible for the compilation of such a schedule. Indeed, the personal factor enters largely into our prescribing, and, whether we choose to admit it or not, into our therapeutics as well. On these grounds it is difficult to criticise any work that professes to deal in an unbiassed manner with the study of pharmacology. It would be better, therefore, to risk a little extra bulkiness of volume rather than exclude all mention of many drugs which have proved themselves useful in the hands of practising physicians. We should have expected in this edition to have found some account of the recent work in connection with the antiseptic action of hypochlorous acid, of the effects of chlorine gas when inhaled—as illustrated by numberless cases that have recently occurred among soldiers—of the "twilight sleep" produced by the administration of scopolamine, while we also look in vain for any mention of leeches, garlic, scarlet-red, the non-staining preparations of iodine, or casein as an ointment-basis. Much more might have been said about chaulmoogra oil, which is dismissed in four lines. We note that the use of the glycerophosphates is stated on p. 684 to be nil; yet these salts enter largely into many of the so-called reconstructive nerve tonics and foods, and are prescribed largely by the profession. A description of the dermatitis from plants strikes us as being hardly relevant to a work on therapeutics. The use of carbon dioxide snow in the treatment of nævi does not appear to be mentioned, only a general statement occurs on p. 79. A good deal of space is devoted to such theoretical considerations as lime starvation of the tissues, the action of nicotine, the nature of counter-irritation, and the effects of the various animal extracts upon the circulatory and other systems. The book teems with German references, but we note that it was "printed in America." As the work of a scholar and a sound teacher it may be safely commended to the notice of senior students and practitioners who desire to possess a good standard text book of pharmacology and therapeutics.

(*a*) "A Text Book of Pharmacology and Therapeutics." By Arthur R. Cushny, M.A., M.D., LL.D., F.R.S., Professor of Pharmacology in the University of London, etc. Sixth edition, thoroughly revised. With 70 engravings. Pp. X., 708. London: J. and A Churchill, 1915. Price 15s. net.

MANUALS FOR NURSES (*a*).

WE have received three very useful books which may be recommended to nurses. Miss Pope's work on Anatomy and Physiology gives an excellent *résumé* of these two subjects in simple language. The illustrations, some of which are in colour, form a special feature of this really delightful volume. The "Quiz-Book of Nursing" should be in great demand with nurses desirous of revising their knowledge prior to examinations. The writers of these two books are nurses of great experience as lecturers on the subjects with which they deal, accordingly we find their work is thorough, practical and helpful. They give just the kind of information which the nurse requires to know during her period of training. The "Handbook of Massage" is written specially for those who are beginning to study the subject. It is, therefore, distinctly elementary in its scope, and is largely based on the author's well-known text-book. Besides chapters dealing with various forms of massage in a variety of diseases, there is one on its use in cases of bullet and shrapnel wounds, frost-bite, and traumatic neurasthenia. A useful account of medical electricity is also given at the end of the volume. The book is very fully illustrated by some ninety figures in the text. It may safely be recommended to nurses and others desirous of knowing something about this useful therapeutic aid.

APPLETON'S MEDICAL DICTIONARY. (*b*)

We wonder why the medical dictionaries found in most consulting rooms are of American origin. Surely the countrymen of Dr. Johnson can hold their own at dictionary-making with Webster's compatriots. The rapid development of medical science involves a steady growth in terminology, and we confess to the need of frequently consulting a medical dictionary. The work under review appears thoroughly up to date, though it is well remarked—what must be the case with such a volume—"it is impossible that the matter of this book should be fixed and perfected." The book contains an appendix of over 50 pages which should prove very useful. The List of Undesirable Terms framed by the American Medical Association is of value to every medical man, whilst Prof. Warren's article on "Analyses of Body Fluids," gives, in condensed, yet readable form, sufficient matter to fill a text-book.

The type is clear and easy to read. The book is bound in flexible leather, and will form a very useful addition to the professional bookshelf.

(*a*) "Anatomy and Physiology for Nurses." By Amy Elizabeth Pope. Second edition, revised and enlarged. $1.75. New York and London. G. P. Putnam's Sons. 1915. "A Quiz-Book of Nursing." By Amy E. Pope and T. A. Pope. Second edition, revised and enlarged. $1.75. New York and London; G. P. Putnam's Sons. 1915. "Handbook of Massage for Beginners." By L. L. Despard. London: Henry Frowde and Hodder and Stoughton. 1915.

(*b*) "Appleton's Medical Dictionary." Pp. 945. New York and London: D. Appleton and Co. Price 15s. net.

LITERARY NOTES.

A new volume entitled "More Minor Horrors," by Dr. A. E. Shipley, is now in the press, and will be published by Messrs. Smith, Elder and Co. in the early spring. It is, in a sense, a sequel to the "Minor Horrors of War," a third edition of which is now in course of preparation.

* * *

From *The Prescriber* offices, Edinburgh, comes a shilling booklet by Mr. Thos. Stephenson, entitled "Incompatibility in Prescriptions and How to Avoid It." It gives a very good account of this important and practical subject, which is apt to be greatly neglected in these days. It ought to be carefully studied and its teaching borne in mind by every practitioner of the healing art.

* * *

Those interested in the surgical advances made in the war will welcome a *résumé* of the subject. "Surgery in War," by Major A. J. Hull, F.R.C.S., R.A.M.C., is an attempt in this direction. Sir Alfred Keogh, K.C.B., has written the Preface, and Lieut.-Col. E. M. Pilcher, D.S.O., the Introduction. Numerous X-ray plates and diagrams elucidate the text. The book will be published immediately by Messrs. J. and A. Churchill.

* * *

The announcement that Dr. W. Blair Bell, Gynæcologist to the Liverpool Royal Infirmary, will shortly publish through Messrs. Bailliere, Tindall and Cox an original work, with 50 plates, coloured and plain, on "The Sex Complex," has excited considerable interest, it being the first definite attempt to deal systematically with the subject. The same firm have just issued the 4th and final part of Mr. Jackson Clarke's work on "Protozoa and Disease." This new part is specially devoted to *Rhizopod Protozoa,* and is a complete monograph in itself; the author's investigations and observations on the origin and causes of cancer will be found most interesting.

* * *

Those who are lured by its attractive title to a perusal of Dorothy Cator's "In a French Military Hospital" (By Dorothy Cator. London: Longmans, Green and Co. Price, 2s. 6d. net.), are condemned to serious disillusionment. From considerable experience in France during the present war, of such hospitals and personnel as she describes, we are led to quite contrary conclusions, and would suggest that a wider knowledge of the hospital work abroad would have prevented the impulsive and untrained authoress from rushing to record in print her hastily formed impressions. The slipshod English of these 99 pages is probably the style most suitable to the matter—hurried notes full of trivial personalities and criticism—which we sincerely trust may never reach the eyes of our gallant allies.

* * *

We have received the "Wellcome Photographic Exposure Record and Diary, 1916." This little volume maintains its reputation as a concise encyclopædia of photographic information, ranging from simple routine operations to the developments of the higher photography.

It informs and advises on photography by night and the correct quantities of flashlight powder; on green, or sepia, or blue toning of bromides, or warm tones on gaslight papers; on time and factorial development, the intensification of colour plates, exposures for interiors, the speeds of bromide papers, the staining of prints, etc., etc. Not one of the varied aspects of the art appears untouched, and besides all this there are instructive tables, simple formulæ and a multitude of useful hints.

The illustrations have always been a feature of this publication.

This year the photographs reproduced are of more than usual interest.

The meeting of H.M. King George V. with the King of the Belgians in Flanders, as recorded by the camera of Mr. J. Wilson Parker, will be appreciated both for its high quality and its historic interest, as also will the fine example of the photographic work achieved on Sir Douglas Mawson's Antarctic Expedition; while nothing could be finer than the two photographs of actual fighting in the Dardanelles, by Mr. Ernest Brooks, the official photographer to the Expeditionary Forces.

Of the "Wellcome" Photographic Exposure Record and Diary, three editions are published—for the Northern hemisphere, the Southern hemisphere, and for the United States of America.

The "Wellcome" Exposure Record can be obtained from all photographic dealers and booksellers. Price in the British Isles, one shilling.

MEDICAL NEWS IN BRIEF.

King and Queen at Star and Garter Home.

The King and Queen visited the Star and Garter Hospital for Disabled Soldiers at Richmond on March 9th. They were received by Sir Frederick Treves and Lord Farquhar, and Major J. L. Dickie, R.A.M.C., the medical superintendent, and Miss Lawrence, the matron, were presented to Their Majesties. There are at present 36 soldiers in the home, and the King and Queen, who made a thorough tour of the hospital buildings, visited each ward and spoke to each patient. Their visit lasted over an hour.

Sir W. Hartley's Gifts to Hospitals.

Sir William P. Hartley in remembrance of his seventieth birthday, and in recognition of his debt to the public, has decided to transfer £15,000 of his Four and a Half per Cent. War Loan to twenty-two London and Liverpool hospitals, £10,000 of this would be transferred to London hospitals, the remaining £5,000 to Liverpool hospitals.

The London hospitals benefited are:—Bermondsey Medical Mission and Surrey Dispensary, £100 each; Queen's Children's (Hackney) and Throat and Ear Hospital (Golden Square), £150 each; Evelina Children's Hospital, Metropolitan Hospital, London Homœopathic Hospital, General Lying-in Hospital, Royal Eye Hospital, Cancer Hospital, Consumption Hospital, Brompton, £250 each; St. George's Hospital, Waterloo Hospital, Charing Cross Hospital, Westminster Hospital, London Temperance Hospital, St. Thomas's Hospital, £500 each; Royal Free Hospital, £750; King's College Hospital, Middlesex Hospital, Guy's Hospital, London Hospital, £1,000 each.

Surgical Operations at the Front.

In a Parliamentary answer on the subject of abdominal operations at the front, Mr. Tennant says:—"The arrangements in France have the full approval of the consulting surgeons and of others most competent to judge. I have quite recently received a report from Sir Frederick Treves in which he states that in many cases a man in need of a grave operation has found himself on the operating table within three or four hours of his being shot, and that he was informed of cases in which operations upon the skull and the abdomen had been carried out within two-and-a-half hours of the receipt of the wound; and he adds that such prompt attentoin could not be obtained by a wounded civilian in any rural district in England."

Chester Royal Infirmary.

The report submitted at the annual meeting of the governors of the Chester Royal Infirmary, held on March 9th, stated that the number of patients treated during last year was 7,804, as compared with 8,067 in 1914. The average cost per head was £73 16s. 5d., against £72 8s. 10d. in the previous year. The total receipts, including £1,221 in legacies, amounted to £8,076 15s. 2d., and the total expenditure to £8,148 18s. 4d., against £6,718 0s. 7d. in the previous year.

By arrangement with the war authorities, 140 beds were to be reserved for sick and wounded soldiers.

The total expenditure for the year exceeded the income for the same period by £355 18s. 5d., against £2,378 18s. 2d. for 1914. The overdraft on the revenue account was now £6,312 9s. 2d. The aggregate of the King Edward Memorial Fund was now £39,384 1s. 6d., and the amount due to the contractors was £47,791 9s. 10d.

Two visiting surgeons had joined the R.A.M.C.

It was announced that Sir Owen Philipps, M.P. for the city, had sent a cheque for £250 as a donation to the King Edward Memorial Fund for the extension and renovation of the Infirmary.

Medical Science in Shakespeare's Time.

THIS was the subject of a lecture delivered on March 7th to the members of the Dundee Naturalists' Society by Dr. A. H. Millar. The lecture was a sequel to one delivered last session by the doctor on "Natural Science in Shakespeare's Time." Shakespeare, Dr. Millar pointed out, began to write at a time of transition in medical science, when the old empirical system was passing away and writers like Vesalius, Fallopius, Fabricius, and Harvey were revolutionising prevalent ideas as to anatomy and physiology. In a series of quotations from the dramas the lecturer showed how aptly Shakespeare could diagnose the symptoms of a disease, and how he almost anticipated Harvey's great discovery of the circulation of the blood, and certainly suggested trying the effects of drugs upon the lower animals with all the eagerness of a modern vivisectionist. In conclusion, Dr. Millar said the study of this subject served to intensify the mystery that surrounded the myriad-minded Shakespeare.

Dundee Infant Mortality.

AT a meeting of the Public Health Committee of Dundee Town Council on March 7th, a suggestion was made that the Medical Officer's annual report on the health of the city (already referred to in our columns), in so far as it dealt with the question of infant mortality, should be remitted to a Committee for consideration, the duty of the Committee being to frame definite recommendations for the consideration of the Town Council.

Reference was made to the seriousness of the problem, and suggested that the subject be discussed at a special meeting of the Town Council. It was proposed that the question should be tackled in a broader way, and that the issues which had been presented by Dr. Templeman fairly and frankly should be taken up by Dundee in conjunction with the larger Corporations in Scotland, and sent to the Local Government Board. While they might carry out something on the lines suggested by Dr. Templeman, he remarked that that was only touching the fringe of the problem.

Bequest to Ramsgate General Hospital.

IT was announced at the annual meeting of the Ramsgate General Hospital that Miss J. Stancomb-Wills, who last year gave £1,000 invested in War Loan stock, for the endowment of the "Lord Winterstoke bed," has now presented an Exchequer bond for £1,000 for the endowment of a women's bed to be named the "Lady Wills of Blagdon."

Lancashire County Medical Officer.

OWING to the continued absence from duty, through illness, of Dr. Sergeant, the county medical officer of health, the Public Health Committee have, in conjunction with the Midwives Act Committee, recommended that Dr. J. J. Butterworth, the school medical superintendent, be appointed to act as temporary assistant county medical officer of health, at a salary at the rate of £200 per annum. "Your committee desire it to be clearly understood that in the event of a permanent assistant county medical officer of health having to be appointed in the future, or of a vacancy occurring in the office of the county medical officer of health, the temporary appointment now proposed will not confer on Dr. Butterworth any right to be appointed to either of such offices."

Medical Treatment of Leith School Children.

LEITH School Board has decided to obtain the services of a local medical practitioner or practitioners for three hours on two afternoons per week, or two hours on three afternoons per week, to continue the work of medical treatment of school children, as it was carried on by Dr. Walker immediately prior to his leaving Scotland on military service. An amendment, which was defeated by 6 votes to 5, was put forward that the Board should appoint a lady doctor to act as Medical Officer to the Board during Dr. Walker's absence, and to devote her whole time to the Board's medical work.

Doctors' Outstanding Accounts.

AT the monthly meeting of the Staffordshire Insurance Committee held at Stafford on March 4th, Dr. Bull referred to a minute of the Medical Benefit Committee, which stated that a letter had been received from a medical practitioner, complaining of delay in settling the amounts owing for 1914, and asked when the doctors might expect a settlement of their accounts for this period. He went on to speak of the hardships of country doctors, amongst these being the increased cost of living, the double cost of petrol, and the increased income-tax. The state of the country practitioner was now really terrible.

The Clerk said that regarding the doctors' accounts, he had just received the necessary information on which to proceed to a settlement, and that work was now going on.

Buxton Military Hospital.

ARRANGEMENTS have been completed at Buxton to convert the Peak Hydro Hotel into a hospital for wounded Canadian soldiers. Over 300 patients are expected, and facilities have been granted to them by the Town Council to have the Buxton waters and treatment, special hours being arranged so that they may not interfere with the general public.

Large Gift to Bristol Infirmary and Hospital.

SIR GEORGE WHITE, presiding at the Bristol Local Infirmary annual meeting on March 7th, announced that it had been arranged, under the will of the late Mr. Francis Cape, of Bristol, that the infirmary and the general hospital should each receive £45,000, free of all charges.

Against L.G.B. Advice.

AT a meeting of West Bromwich Guardians on March 6th, the General Purposes Committee reported that they had considered the question of the appointment of a woman assistant medical officer, as suggested by Dr. Fuller of the Local Government Board. They recommended the Board not to fill the position during the continuance of the war. The report was adopted.

Doctor and Petrol Supply.

AT a meeting of the Worcestershire Insurance Committe on February 26th, the Chairman said a doctor at Moreton-in-Marsh, who was responsible for the care of patients at Blechley had written stating that a petrol supply company had refused to supply him with petrol, and therefore he hoped the committee would not consider him responsible for the neglect of patients. The Chairman said the committee could not relieve him from his engagement for that reason. The doctor could travel by train, or obtain petrol from another place.

Liverpool Maternity Hospital.

THE Liverpool Maternity Hospital, the annual meeting of which was held on March 6th, is extending its usefulness in a direction which is bound to have important beneficial results. A scheme was foreshadowed for the establishment of maternity centres for ante-natal and pre-maternity work, and for the

opening of a rest home for cases of this character. The report showed that during the year, 1,185 patients were attended in the districts, against 1,301 in the previous year, the services of the district medical officers being called for in 131 cases, and 640 patients were admitted to the hospital, as against 646. The hospital had again been continuously full during the year, and 55 women had been refused admission owing to lack of accommodation. In the School of Midwifery 74 pupil midwives were trained, and 67 were successful in passing the examination. The institution was continuing its work of infant welfare, and there was an average attendance of 60 mothers with their babies at the weekly consultations.

Spectaclemakers and the War.

It has been brought to the notice of the Spectaclemakers' Company that some of its diploma-holders having attested, and being about to join the forces, there is a danger of enforced closing of their businesses. The company is now offering to any nominee of a diploma-holder, free of charges, the services of the official instructor for a course of instruction in optics in London, with a view of his taking his place and continuing his business.

Fewer Suicides in Paris.

Suicides in Paris have dropped to about two a week, as compared with an average of fifteen to twenty in ordinary times.

A wag suggests that everyone is so anxious to see how the war will end that they cannot bear to shuffle off this mortal coil until victory crowns the day.

It is just possible that suicides are fewer now because so many favourite means of going to one's long account are not readily available. For instance, from the first moment that war was declared all gunsmith shops were closed up, and neither arms nor munitions of any kind can be bought. No one is allowed on any of the great public monuments, so that jumping off bridges or the Arc de Triomphe is no longer possible.

Asylums Board Economy.

At the meeting of the Metropolitan Asylums Board on March 4th, estimates to meet the expenditure for the half-year ending September 30th, 1916, were adopted which show a reduction of £32,750 compared with the corresponding period of 1915, and involve a rate of 3d. in the pound, or one-eighth of a penny less. The finance committee reported that the decrease is mainly due to three hospitals having been taken over by the military authorities, and to the exercise of the strictest economy in all the Board's institutions.

Father Higley drew the Board's attention to the fact that there were 500 vacant beds in three of the Board's institutions for children, and that there were 229 paid officers for 534 children in these three schools —three officers for every seven children.

British Steel Casques tested in Action.

A report from British Headquarters, France, dated March 6th, states that the new British steel casque has had its first great test in the assault upon the Ypres Bluff on March 2, and the results are more than satisfactory.

The correspondent says: "I was this morning shown a batch of casques from wounded men, which have been collected from the field. In all cases the men who were wearing these were either unscathed or suffering from slight concussion or mere scalp wounds. It is believed that had they not been wearing these helmets they would either have been all killed or dangerously wounded. One of the casques bears an indentation from a heavy blow with the butt-end of a German rifle. The man thus struck bayoneted his assailant and was none the worse for the assault.

Another casque bears distinct evidence of a direct hit with the business-end of a shell. Several of them are rent by fragments of shrapnel casing, manifestly with the force which against a cloth cap would have been quite sufficient to cause fracture of the bone. Others are pitted by shrapnel bullets. Most of the men who wore these state that except for a rattling like a hail storm sweeping over a galvanised roof, and a sudden compression around the rim of the helmet, they were unaware that they were being struck."

Chinese Decorations for British Doctors.

The King has been pleased to give and grant unto the undermentioned gentlemen his Majesty's Royal licence and authority to wear the following decorations which have been conferred upon them by the President of the Republic of China in recognition of valuable services rendered by them:—

Fourth class of the Order of the Excellent Crop: David Duncan Main, Esq., L.R.C.P., L.R.C.S., Church Missionary Society's Hospital, Hangchow.

Fifth Class of the Order of the Excellent Crop: Sidney Gerald Kirkby-Gomes, Esq., Medical Officer, Peking-Mukden Railway, Peking.

A Medical "Conscientious Objector."

A conscientious objector at Wallesey was the house surgeon of the largest hospital in the borough. His father testified to the sincerity of the applicant's religious convictions, stating that he was converted at the age of twelve at a Torrey and Alexander mission, and had dedicated his life to Christian service. In answer to the Chairman, the surgeon declined to join the R.A.M.C., as that would mean joining the Army, but he said he was delighted to attend to soldiers at the hospital. The Chairman: If we put a label on you and say: "This is a civilian," you would help the wounded. If we put you in khaki, you would not?—That is so. A member of the tribunal told the applicant that his conscience must be very elastic, and that he was evidently prepared to give attention to the wounded so long as he was far enough away from the firing line. Exemption from combatant service granted.

Rheumatism as an "Accident."

Judgments were delivered in the House of Lords on March 6th, dismissing the appeal of the Glasgow Coal Company (Limited) from a decision of the Second Division of the Court of Session in Scotland on a case stated by the sheriff substitute of Lanarkshire under the Workmen's Compensation Act. The respondent, a workman named Welsh, had been employed in one of the appellants' pits, and when the pit became flooded he was sent to bale out the water. He was engaged in this work for eight hours, standing in the water up to his chest. He afterwards suffered from rheumatism, which prevented him from earning full-rate wages. The sheriff substitute found that the rheumatism was an injury caused by accident arising out of and in the course of the man's employment, and made an award in his favour.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s. post free at home or abroad.

Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially appointed agents. Indian subscriptions are Rs. 15.12. Messrs Dawson and Sons are our special agents for Canada. For South Africa, The Record Publishing Co., Cape Town. Messrs. Geo. Robertson and Co., of Sydney and Melbourne, are our special agents for Australia.

Original Articles or Letters intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice

to the publisher or printer before the type has been distributed. This should be done when returning proofs.

CLINICAL LECTURES, PAPERS, ETC., RECEIVED.

IN addition to those announced in our last week's issue as received, the following have also come to hand, and are hereby acknowledged with thanks:—

CHAUFFOND, PROFESSOR, of Paris. "Posterior Friction Sounds, associated with Large Effusion in the Pericarditis of Bright's Disease."

KIRMISSON, PROFESSOR, of Paris. "Inherited Syphilis in the Production of Bone Lesions."

PURSLOW, DR., Birmingham. Clinical lecture on "Extra-Uterine Gestation."

GLADSTONE MEMORIAL AT CHESTER INFIRMARY.

LORD BRYCE will on April 15th open the Gladstone wards of Chester Royal Infirmary, which are to form part of the Hawarden memorial to the late Lieutenant W. G. C. Gladstone, M.P., Royal Welsh Fusiliers, who was killed in action in Flanders in April last year. Lieutenant Gladstone served for a time on Lord Bryce's staff at Washington.

ANTONY (Bedford). Fatal street accidents in the City of London and the Borough of Southwark were 17 more in 1915 than in the previous year.

MAKING ASSURANCE DOUBLY SURE.

OLD LADY: What precaution do you take against water infected by microbes?

Soldier: Well, mum, we boils it—

Old Lady: Yes?

Soldier: The we filters it—

Old Lady: Yes?

Soldier: Then we drinks beer.—*The Bystander.*

R.A.M.C. (Manchester).—The little book recently issued by Capt. Begg, entitled, "The Selection of the Recruit," will probably answer your requirement best. It contains a mass of information for rapid reference for those engaged in the medical examination of recruits.

AN UNREGENERATE LAY.

Froth, a magazine published at the Pennsylvania State College, contains the following:—

Tobacco is a dirty weed,
I like it;
It satisfies no normal need,
I like it;
It makes you thin, it makes you lean;
It takes the hair right off your bean;
It's the worst darn stuff I've ever seed,
I like it.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, MARCH 15TH.

ROYAL SOCIETY OF MEDICINE (1, Wimpole Street, W.).—"History of Medicine" at 5 p.m. Books, MSS., etc., on view at 4.30 p.m.: Mr. R. R. Steele: "A Note on the Scientific Writings of Roger Bacon." Mrs. Charles Singer: Plague Manuscripts. Sir William Osler, Bart., F.R.S.: The MSS. of the *Religio Medici*. Captain T. A. Malloch, C.A.M.C.: Sir John Finch and Sir Thomas Baines

ROYAL MICROSCOPICAL SOCIETY (20 Hanover Square, W.).—8 p.m.: Professor J. A. Thomson: Original Factors in Evolution. Sir E. Ray Lankester, K.C.B.: The Supposed Exhibition of Purpose and Intelligence by the Foraminifera.

THURSDAY, MARCH 16TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF DERMATOLOGY) (1 Wimpole Street, W.).—5 p.m. Exhibition of Cases at 4.30 p.m.: Dr. George Pernet: (1) Dermatitis Herpetiformis in a Boy; (2) Staphylococcia in a Girl with Xerodermia (Staph. en nappe et en foyers à progression excentrique).

FRIDAY, MARCH 17TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF ELECTRO-THERAPEUTICS) (1 Wimpole Street, W.).—8.30 p.m.: Discussion on Experiments and Experiences with the Coolidge Tube. Opened by Dr. Knox on Experiments with Rotatory and Fixed Tube. Sir James Mackenzie Davidson, Dr. Orton, and Dr. Finzi will also speak. Members wishing to take part in the Discussion will kindly communicate with Dr. Gilbert Scott, 6 Bentinck Street, W.

SOCIETY OF TROPICAL MEDICINE AND HYGIENE (11 Chandos Street, Cavendish Square, W.).—5.30 p.m.: Paper:—Captain H. J. McGrigor, R.A.M.C.,: Some Experiences in the Treatment of Syphilis in the Army, with Special Reference to the Administration of "606" in Concentrated Solutions. Dr. H. Bayon: Short Demonstration of Sections and Cultures of Skin Diseases, with some Remarks on the Treatment of Syphilis in African Native Tribes and among the Workers in the Rand Gold Mines.

Vacancies.

Leeds Public Dispensary.—Lady Resident Medical Officer. Salary £130 per annum, with board, residence, and laundry. Applications, with copies of three recent testimonials, to be addressed to the Secretary of the Faculty Public Dispensary, North Street, Leeds.

The Guest Hospital, Dudley.—Assistant House Surgeon. Salary £120 per annum, with residence, board and washing. Applications to the Secretary.

The Guest Hospital, Dudley.—Senior Resident Medical Officer. Salary £150 per annum, with residence, board and washing. Applications to the Secretary.

The Royal Surrey County Hospital, Guildford.—House Surgeon. Salary £150 per annum, with board, residence, and laundry. Applications to the Secretary.

Bury Infirmary.—Junior House Surgeon. Salary £150 per annum, with board, residence and washing. Applications to the Honorary Secretary, Infirmary, Bury, Lancashire.

Victoria Hospital, Burnley.—House Surgeon. Salary £160 per annum, with residence, board, and washing. Applications to F. A. Hargreaves, Hon. Sec., 7, Grimshaw Street, Burnley.

Downs Sanatorium.—Assistant Medical Officer. Salary £250 per annum, with usual residential allowances. Applications to the Clerk to the Board, Office of the Board, Embankment, E.C.

Cambridgeshire Asylum, Fulbourn, near Cambridge.—Junior Assistant Medical Officer. Salary £200 per annum, with board, lodging, washing and attendance. Applications to the Medical Superintendent.

Nottingham City Asylum.—Senior Assistant Medical Officer. Salary £300 per annum, with apartments, board and laundry. Applications to the Medical Superintendent.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Bishop's Stortford, Herts; Brighouse, Yorks., West Riding.

Births.

BEATTIE.—On March 9th, at 3, Ellison Place, Newcastle-on-Tyne, to Dr. and Mrs. Thomas Beattie, a daughter.

BURTON.—On March 7th, at 13, Prince's Gate, S.W., the wife of Lieut. Hugh Leonard Burton, M.B., R.A.M.C., of a son.

CRAIG.—On March 12th, at 113, Albany Street, Regent's Park, N.W., to Dr. and Mrs. Jas. C. Craig, a daughter.

FRAZER.—On March 8th, at 33, Colville Square, W., the wife of Prof. J. E. Frazer, F.R.C.S., of a son.

HIEBER.—On Jan. 18th, at Leh, Western Himalayas, to Dr. and Mrs. A. G. Hieber, a daughter (prematurely, owing to pneumonia, who survived only three hours).

KING.—On March 6th, at Royal Marine Infirmary, Deal, the wife of Surgeon W. H. King, R.N., of a daughter.

MATHEWSON.—On March 3rd, at "Caradoc," Clun, Shropshire, to Dr. and Mrs. J. W. Mathewson, a son.

PRIDHAM.—On March 5th at Woolston Lodge, Woolston, Hants, the wife of Gerald H. Pridham, M.R.C.S., of a son.

SEQUEIRA.—On March 5th, at Woodburn, South Queensferry, the wife of Fleet-Surgeon W. S. H. Sequeira, R.N., of a daughter.

Marriages.

EAST—MOMBER.—On March 7th, at the Priory Church, Great Malvern, Charles Harry East, M.D., of St. Clare, Malvern, to Mabel, wife of the late Lt.-Colonel Momber, K.O.Y.L.I., of San Remo, Italy.

FENTON—FERGUSON.—On March 7th, at St. Matthias, Earl's Court Square, W. J. Fenton, M.D., F.R.C.P., of 58a, Wimpole Street, W., and L. O. C. Ferguson, only daughter of Major H. and Mrs. Ferguson, of 10, Glazbury Road, Kensington.

HARTRIDGE—WILSON. On March 7th, at the Parish Church, Kegworth, Hamilton Hartridge, Lt., R.N.V.R., M.A., M.B., Fellow of King's College, Cambridge, elder son of Henry and Sophy Hill Hartridge, of 19, Palace Court, London, W., to Kathleen, the only daughter of Hugo and Annie Wilson, of Springwell, Kegworth, Leicestershire.

MOLESWORTH—GRIFFITH.—On March 7th, at St. Anne's Church, Eastbourne, Surgeon Eric M. Molesworth, R.N., to Ethel A. Griffith, daughter of Mr. and Mrs. Isaac Clark Griffith, of The Chace, Eastbourne.

SMERDON—WHITE.—On March 7th, at the Church of St. Mary Magdalene, Enfield, Edgar Wilmot Smerdon, M.D., F.R.C.S., Lieut., R.A.M.C. (T.C.), son of Colonel and Mrs. F. G. B. Smerdon, of Oaklands, Binfield, Berks, to Hilda Mercedes, daughter of the late Mr. John White and Mrs. White, of Valencia, Spain, and "Alameda," Palmerston Crescent, London, N.

Deaths.

BARNES.—On March 6th, at Merstham, Surrey, Arthur Richard Barnes, M.D., aged 65.

BARNICOT.—On March 10th, at Queen Street, Hitchin, Joseph Barnicot, M.D.Cantab., of typhoid fever.

BENNETT.—On March 5th, at "Hillside," Upper Lydbrook, Ross-on-Wye, of pneumonia, Edward Bennett, L.R.C.P. and L.R.C.S. Edinburgh, son of the late Edward Augustus Bennett, of Marsden Hall, Nelson, Lancashire.

BIRD.—On March 10th, at Sutton Oak, Charles Thomas Grant Bird, M.A., M.B., Ch.B., son of Canon Bird, aged 32 years.

GRANT.—On March 8th, at Reay House, Inverness, Lieut.-Col. R. A. P. Grant, late 43rd Light Infantry and Army Medical Service.

HAYES.—On March 6th, at Highfield House, Basingstoke, Hawkesley Roche Hayes, L.R.C.P., J.P., aged 80.

LANDALE.—On March 8th, at Dunholme, Cheltenham, Deputy Surgeon-General James Landale, M.D., late R.A.M.C., in his 80th year.

PITTOCK.—On March 5th, George Mayris Pittock, M.B.Lond., F.R.C.S., F.R.M.S., of Winton, Canterbury, formerly of Margate, aged 84.

RIDGE.—At "The Platanes," Denmark Hill, Captain Percy Brewster Ridge, R.A.M.C. (T.), aged 33 years.

THOMSON.—On March 6th, at Oxford, suddenly, Theodoro Thomson, C.M.G., M.A., M.D., late Assistant Medical Officer, Local Government Board, aged 57.

UNDERHILL.—On March 10th, at Mountjoy, West Bromwich, Thomas Underhill, M.D., J.P., in his 93rd year.

WHITE.—On March 5th, at 59, Victoria Road, South Southsea, Thomas Charters White, M.R.C.S.Eng., &c., late of Belgrave Road, S.W., in his 88th year.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, MARCH 22, 1916. No. 12.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

Dr. Hayes and Sir A. Keogh.

THE correspondence between Dr. Maurice Hayes, the Secretary of the Irish Medical War Committee, and Sir Alfred Keogh, to which I briefly referred last week, will be found on page 266 of the present issue. Dr. Hayes calls the Director-General's attention to the following two paragraphs taken from the "Periphery" of March 8th:—

"That neither the one nor the other of these responsible and well-informed officials" (Sir Alfred Keogh and Mr. Tennant) sees any present need for increasing the existing number of officers in the R.A.M.C."

"On the one hand we know on unimpeachable authority, that the Director-General does not want any more medical officers, a fact which, on the face of the numbers enrolled, must be perfectly obvious to any thinking person."

In the course of his letter Sir Alfred Keogh says "The statement is entirely false. It is very far from anything I have ever said." I had, of course, no desire to misrepresent the Director-General, still less had I any object in so doing. The error, if error there was, was one of interpretation of an apparently unambiguous official statement. I take from the Parliamentary Intelligence on page 274 of the *Lancet* of January 29th the following: "Thursday, January 20th. Supply of Medical Men for the Army. Mr. Tennant (Under-Secretary for War), answering Mr. Lynch, said, 'Thanks to the patriotism of the Medical Profession, there is no present anxiety regarding the supply of doctors for the Army,'" a statement which must clearly be taken to reflect the view of the Director-General.

The Facts.

Now, Sir Alfred Keogh has himself been understood to use very similar words to those employed by Mr. Tennant, and he certainly uses them in the letter which appears on page 266: "There is," he says, "no present necessity for increasing the number of doctors with the armies abroad," a sentence which, in the absence of the modifying clauses which follow, could only be taken to mean what Mr. Tennant was understood to mean and what Sir Alfred Keogh has himself been quite honestly and sincerely taken to mean by many in search of information. One occasion on which this meaning was put upon his words must surely be within the recollection of the Director-General. The expressions, "entirely false" and "very far from anything I have ever said," are thus clearly, to say the least, very inappropriate. It is not necessary to pursue this matter beyond expressing the opinion that, as qualifying clauses appear to have been necessary, it is a pity that they were not used, and insisted upon, before this letter was written.

The Atmosphere.

BUT it is never just to characterise a statement apart from the atmosphere in which it is made, any more than it is fair to criticise a sentence without reference to its context. What I said in the above-quoted paragraphs must be considered in connection with the question with which I was dealing. On the one hand there was Mr. Tennant's answer in the House, which said that there was "no anxiety" about the supply of medical men for the army; on the other, there was what I ventured to describe as "the shrill hysterical minatory shriek of the Central War Committee which enjoins upon all and sundry the urgent necessity of immediate attestation." The "no present anxiety" of Mr. Tennant and "The credit of the profession is at stake; go and enrol at once" of the Central War Committee create two atmospheres which are mutually exclusive; the one brings the other into high relief. Being a simple-minded, law-abiding person, I naturally preferred the official atmosphere.

An Important Estimate.

IT now looks, however, as if the shriek were nearer the true tone than the note of confident official equanimity which, on January 20th, was sounded from the Treasury Bench. Government Departments have a way of withholding information which, while seemingly of no value to the enemy, would be immensely helpful to those at home. A good instance of this is provided in Sir Alfred Keogh's letter. He now tells us for the first time—I think I am right in saying that it has never before appeared in print—that he requires 150 doctors a month in order to make up

for what may be called normal wastage—*i.e.*, sick, wounded, and time-expired men. This is a very important estimate, the explanation of which, inasmuch as it puts a totally different complexion upon the calls for enrolment which have been issued by the Central Medical War Committee, is more important still. An earlier official statement to this effect would have prevented much misunderstanding and have saved much trouble. Such an estimate as this is both intelligible and reasonable, and will do more to encourage enrolment than many circulars.

The Circulars. Now, if the circulars of the Central Medical War Committee had this estimate of the Director-General's behind them, their tone of urgency would certainly seem to be justified. Nevertheless, I still think that some of the methods employed to emphasise that urgency were regrettable. In the "Periphery" of March 8th, to call attention to a threatening note which I deplored, I italicised a passage from one of these circulars which hinted that certain privileges might be withheld from "those practitioners who fail to enrol with our committee." With the same end in view I now italicise a passage from a printed post-card circular sent out from 429, Strand, dated March 11th, 1916. "*Men holding the Certificate of Enrolment may be employed in part time military work, irrespective of their age, whereas other men will not be employed on such work unless they are over* 45." The fact here stated is, of course, correctly stated, but no one can pretend that it is tactfully stated. Such are not among the best methods of persuading the reluctant.

A Question. In this connection I may perhaps suitably deal with the laconic enquiry of a correspondent who writes to me saying, "What is the matter with the Central War Committee, and why do you gird at the British Medical Association?" The proper answers to these two questions are very much intermingled, but I will endeavour to unravel the rather tangled skein. In the first place I would wish to make it quite clear that not only have I nothing against a Central War Committee as such, but that, if properly constituted, I regard such a body as, in this crisis, essential to the interests not only of the profession but of the nation. If, in my view, there be anything "the matter" with the Central War Committee, it is not inherent in the principle. On some questions of detail I confess to the opinion that the existing organisation might be very much improved, and the direction in which I feel that improvements might be effected I will now endeavour to indicate.

Personal Grievances. But let me say at the outset that I do not in any way associate myself with the rather paltry personal grievances which have appeared in the *Daily Chronicle* and elsewhere. The young gentlemen who don the King's uniform for service abroad must be made to realise that they take service, not for their own honour and glory or for the purpose of enlarging their operative experience, but in order to serve their country in its hour of need. If Mr. Jones, with the blushing honours of the F.R.C.S. freshly placed upon his brow, is asked to wash bottles or to dress ulcers he must understand that such is, for the moment at any rate, the job which has been allotted to him, and however *infra dig.* he may conceive it to be, he is there to perform it to the best of his ability. If he is a patriot and a gentleman he will do it uncomplainingly, in the full confidence that he will, as soon as possible, be given something to do which is more in consonance with his special training and his proved abilities. In all human endeavour grievances are sure to occur, and it is bound to happen that some talent is wasted; but these individual cries of distressed vanity find no sympathetic echo in, at any rate, one breast.

Discriminate. By this I must not be understood to mean that I regard all doctors as merely doctors. I have in these columns frequently urged the opposite opinion, and I adhere very strongly to the views that I then expressed. But what can be done and ought to be done after eighteen months of experience is a very different thing from that which has to be done when the nation is surprised into a species of warfare for which, rightly or wrongly, no provision had been made. Sir Alfred Keogh and his coadjutors did the best they could under very trying conditions, and though that best may not have been the ideal best, it was, in the circumstances, a very good one. Let us in such matters refrain from wild and weak complaining, and "forgetting those things which are behind and reaching forth unto those which are before," do what we can to retrieve our initial mistakes.

C.M.W.C. and B.M.A. To return to the Central War Committee and the B.M.A., "The matter" with the former is that it is too much tainted with the latter. Without in any degree derogating from my general disapproval of the past record of the B.M.A., it is but bare justice to admit that this Association was the only one which had the machinery promptly and effectively to deal with the present emergency. That the Association cast itself into the breach, disbursed its money, showered its facilities and lavished the time and experience of its officials, it would be ungenerous and even churlish to deny. But it did more: it graciously co-opted several distinguished leaders of the profession, some of whom represent bodies of known antagonism to the Association. But even so, it did not do enough. It may seem a hard thing to ask of an Association which has done so much, to go further and efface itself entirely. In any other set of conditions such a demand would amount to an impertinence, but matters being as they are, it is the only course open to a patriotic body to pursue.

Pledges. The enrolment form which doctors are now being urged to sign is an undertaking not to the King or to the Government, but to the Central Medical War Committee. It is

a pledge that the signatory will act in a certain way if and when he is called upon to do so. Now, I need not say more than that in the matter of pledges, as in the matter of diplomacy, the B.M.A. has an unfortunate record, and so long as the Central Medical War Committe is associated in men's minds with the B.M.A. so long will the reluctance to give this particular pledge be manifest, and very reasonably so. If the Central Medical War Committee is to secure the full confidence of the whole profession, which it is most desirable that it should do, it must shake itself free from this atmosphere. It must ask of the B.M.A. that the latter should consent to remove the remaining marks of identification between the two bodies and enable the Central Medical War Committee clearly, definitely and convincingly to announce that it has no connection whatever with the British Medical Association.

To Carry Conviction.

Now, what is going to convince the profession on this point? The answer is plain enough. Three things. The first is an assurance that the B.M.A. will be reimbursed for the money which it has patriotically expended on this scheme. The second is an intimation that the Central War Committee has arranged to hold its meetings elsewhere than at the offices of the Association, 429 Strand. The third and, in one sense, by far the most important, is an announcement that the present Secretaries of the Central Medical War Committee, one of whom is a Secretary of the B.M.A., and the other a very active and prominent, but not a very tactful, member of the Association, have been replaced by two Secretaries, preferably laymen, but certainly not members either of the Central Medical War Committee or of the British Medical Association. The first two points present no real difficulties; it is the third which is the crux. Dr. Cox and Mr. Bishop Harman are admittedly "British Medical" men, and the secretariat of the Ceneral War Committee has unfortunately shown itself typically "British Medical" in its methods. If these two gentlemen would consent to be persuaded by their interpretation of the word "patriotism" into recognising that they are not diplomatists, and by giving effect to that recognition by resigning their present posts to make way for more acceptable occupants, they would do a great deal to retrieve the errors for which they are held responsible.

The Reason.

The necessity for securing the full confidence of the profession in the Central War Committee cannot be too strongly emphasised, and no sacrifices are too great, if by making them, this end can be securely attained. Every member of the profession of military age is being invited to enrol: that is to say, he is being invited to place himself, his family, his professional prospects, and his financial position unreservedly in the hands of a certain body of professional men. If he is convinced that this body will give a sympathetic ear to his difficulties and will bring a judicial spirit, an understanding mind, and a tactful manner to the solution of the immensely complex and delicate problems which it will be called upon to decide, then he will have little or no hesitation in accepting the invitation to sign the enrolment pledge. If, however, he continues in a condition of serious doubt on these points, he will remain elusive, though unmoved. And, let it be quite clearly understood that, rightly or wrongly, his confidence in the British Medical Association is at the best not of the quality which will move him to refer doubtful and intimate points to the jurisdiction of a body so closely connected with the Association as the Central Medical War Committee is now reputed to be.

A Strong Committee.

There are other reasons why the Central Medical War Committee should be so constituted as to command the unqualified approval and complete confidence of the profession. There is at present no organisation which exists for the purpose of voicing the views and defending the interests of medical men *vis-à-vis* the public. We are not adequately represented in Parliament, and although the House of Commons is taking a great interest in our affairs at the moment, this interest will certainly prove to be as evanescent as the other spasmodic signs of appreciation which during the last twenty years have occasionally manifested themselves in the same august assembly. The civilian medical men are now supplying 90 per cent. of the doctors employed by the military authorities, and yet there is no recognised body—recognised, that is, either by the doctors or the authorities—which can urge upon the latter the views or the claims of the former. A Central Medical War Committee which derives its strength not only from its *personnel*, but also from general professional approval, could undertake such functions with great advantage to both parties.

An Example.

There have, for example, been complaints of the application of undue military rigidity in dealing with those civil doctors who are engaged on war service. There is very little doubt that many of these complaints are quite reasonable. The military reply is, however, equally reasonable. It is very human and, in a sense, very logical. It says that as soon as a man is in military uniform he must bend his neck to the military yoke, and do as he is bid. Now, if there were a really strong Central Medical War Committee it could, and would, see that this rigidity in suitable cases would be transformed into a certain degree of elasticity. But until pressure is brought to bear upon the military arm, it is not likely to alter its traditional methods. I understand that Sir Alfred Keogh, who is always a doctor first, and a soldier afterwards, has done his best to introduce some elasticity, and in individual cases he has succeeded; but what is one among so many?

Sinapis.

A military hospital to accommodate 400 patients is to be erected at Bognor.

THE PSYCHOLOGY OF THE CONSCIENTIOUS OBJECTOR.

WHENEVER the governing authority decrees that for the good of the country certain things must be done although they may involve a degree of discomfort, dislike or hardship upon some individuals, the conscientious objector is sure to make his appearance. So we have conscientious anti-vaccinationists, anti-inoculationists, anti-compulsionists, etc. It was therefore to be expected that "Conscience" would be invoked to secure immunity from war service by those who prefer to have their own safety at the expense of the lives of others.

And so it has turned out. No consideration of the needs of the country, no appeal from the constitutional leaders, no sense of shame can galvanise these selfish objectors into anything but resistance to being themselves obliged to join and help those who are using their strongest efforts to fend off and annihilate the enemy. Even in countries where universal service has been for years a factor deep-set in the mind of the male population, there are to be found many who wriggle and twist in all conceivable directions to get out of the obligation to serve, but so well are those shirkers known that they have a short shrift, and in only a few instances do they obtain exemption. Of course, they must give a reason for their defection. They cannot claim bad health, for that would be disallowed by medical examination, and so they say that it is against their "conscience," and through fear lest this should be interpreted as cowardice (which in most cases it really is) they base their scruples upon religion with the view of resting their motives on the highest platform which they suppose will help them. Alas! they show a sad ignorance both of Religion and Psychology!

The conscientious objectors base their secession from their fellows on the ground of possessing some special faculty which they call their conscience, or moral sense, or instinct, which regulates and accounts for their conduct. Unfortunately for them there is no such faculty! Modern psychology is in nothing more busied than in showing that this faculty process, the innate presence of a power such as conscience or free will does not exist; it is an exploded theory and is untenable. The objectors are equally wrong on religious grounds when they say that the shedding of blood is against scriptural teaching. Why! the whole of the Christian religion rests upon it! The crucified Christ's body and blood were oblated for the sins of the whole world! And if these recalcitrants read the Old Testament they will see that thousands upon thousands of men, women and children were killed by Divine command. Where, then, comes in their plea that it is against the Christian religion to shed blood?

What the conscious objector calls his conscience is simply a strong feeling, conjoined with an idea which leads to action, and the leading motive is the one most favourable to himself. It is, in fact, his character which is the source of both his conscience and his will. For instance, a man feels that in reality he is a coward; at the same time he knows that it is his "duty" as a citizen to defend his country when called upon; but the feeling of fear prevails over the sentiment of duty, and so he invents excuses and says that his conscience is his authority and prompter, the fact being that he has manufactured a conscience which is in no way an innate moral sense. Circumstances might arise, such as the offer of a lucrative post free from danger, where he would find another conscience which he would say prompted him to enlist! So that he may have no end of consciences, and there is no such thing as an innate guiding conscience faculty—it is entirely a matter of expediency, and a man may have as many "consciences" as he has feelings and ideas. When the feeling is very strong through thinking very intently upon one subject to the exclusion of others, his "conscience" becomes very "clear"; he then becomes a mono-ideist and intolerant of all other obligations. No one cares to risk his life nor to kill others unless he is obliged to do so by patriotic considerations, and as the conscientious objector bases his objection to military service on the ground of not wishing to shed blood, he must accept this alternative, either that he is a coward and is afraid to risk his life when the public and private necessity arises, or else that he is an undutiful citizen when called upon by the State and freed from blood-guiltiness by the articles of the established church of his country.

Many of the conscientious objectors are insane; others are mono-idealists with no sense of logic or ethics in their arguments. They are really Casuists, a Casuist being defined as one who reflects about his duties and tries to bring them into line with some intelligible moral standard. They remind one of Fielding's "Parson Twackem and Philosopher Square," who only took to arguments when they wanted to reason themselves out of some obvious duty, and they bear out Rousseau's dictum that "Conscience is the best of Casuists." Conscientious objectors were well known in Shakespeare's time, for he makes Clarence's murderer say, "Conscience is a dangerous thing, it makes a man a coward," and again in Timon he says that policy sits above conscience.

Those who, being in good health and otherwise eligible, decline to follow the country's call are at the least unpatriotic, and should not be allowed to screen themselves under their selfish objections. Why listen to such invertebrate disciples of Apemantus, who pray for no man but themselves! The State should make them go, just as it makes them pay taxes or light up a bicycle at sunset, or go to prison if they neglect their children. The conscientious objector says he follows his conscience. It is just the other way about; his conscience is his servant, not his guide, and if he thinks he hears it talk he tries to smother it.

T. CLAYE SHAW, M.D., F.R.C.P.

DR. W. H. WILLCOX, M.D., F.R.C.P., Lieut.-Col., R.A.M.C., has been granted the rank, of Colonel, on his appointment as cosulting physician to the Mesopotamia Expeditionary Force.

CURRENT TOPICS.

Proposed Ophthalmic School in Glasgow.

At a recent meeting of the Glasgow School Board a motion was submitted that immediate steps be taken to provide classes for children of school age having defective sight and myopia, the school to be as centrally situated as possible. It was agreed to remit the motion to the joint consideration of the Special Schools and Medical Inspection Committees.

There is every reason to wish this scheme well. Town children have woefully deficient sight, especially for long distance. Their eyes have not had the necessary training, their field of vision being confined to the streets of a closely built town. It is different with children reared in the country or at the coast. They have the chance of exercising their vision over big distances, with the happiest results.

It seems interesting to watch the development of the School Board, *quâ* School Board. The members thereof (usually Kirk nominees) are strictly forbidden in any way to interfere with the purely educative portion of the school-work. Perhaps as well: their function is to say ditto to whatever is decreed by a gentleman sitting lonesome and "far awa' frae bonnie Scotland." He is called "My Lords." But these energetic gentlemen will not rest: they effloresce: they break out, like a carcinoma, in some new unexpected quarter. Now it is "baths," next it is "clogs," again school cliniques, with special stress on pediculi capitis. Oh! they are wonderful. They have heard of the "Mens sana in sano corpore," and as "My Lords" holds on by the "Mens": they look on the "corpus vile"—and the viler the better—as their shekinah. So knowing that the medical profession is easy to exploit they have called in members of our profession to help them in their good work. We have responded—for salaries that we don't boast about.

State Registration of Nurses.

We referred a few weeks ago to the proposed "College of Nursing" of which Mr. Arthur Stanley is the chief promoter. There have been two conferences on the subject at which representatives of those interested in the State Registration of Nurses have been present. It is only right to say that Mr. Stanley has set himself to meet criticisms of his project in a most conciliatory manner, and has shown a desire to have the matter fully discussed. Some of his supporters and advisers have not, it is true, been so judicious, but that may pass. The upholders of State registration will, however, be well advised not to let themselves be persuaded to give up their demand by any show of reasonableness on the other side. The claim for State registration is clear, and it is made not only by the overwhelming majority of trained nurses, but by the majority of the medical profession. A voluntary enrolment will not fulfil any of the purposes of a State register, but it may easily block the way. Over and above this, Mr. Stanley's scheme contains the entirely objectionable condition of government by a self-nominated and irresponsible committee containing an unknown proportion of lay people. Much play has been made by the promoters of the scheme by the misleading analogy of the proposed College of Nursing with the Incorporated Law Society. As a matter of fact, the control of the roll of solicitors is in the hands of the Lord Chancellor and not of the Incorporated Law Society, but, apart from this, we should not envy the man who had the audacity to propose to the solicitors' profession that the government of the Incorporated Law Society should be given to a self-nominated committee consisting of a mixture of solicitors and well-meaning busybodies, who have no knowledge of law but were interested in the education of solicitors. This would be a fair parallel to what Mr. Stanley and his advisers suggest to the nursing profession.

Treatment of Wounds with Horse Serum.

Prof. Lignieres, at the Academy of Medicine, warmly advocated the use of horse serum as a dressing for wounds. He stated that fresh serum can easily be obtained in all large centres. One or more horses are kept from which every 15 or 20 days blood amounting to 10 or 12 litres, according to the size of the horse, may be obtained, the only precaution being to remove half the amount at one time, the half being drawn at an interval of 24 hours.

It is important to note that the second lot is always more active than the first. The serum may be used fresh, without heating, by means of compresses, renewed once or twice in 24 hours. If the serum has to be preserved, the author advises a certain quantity of carbolic acid to be added, but never more than half per cent. The carbolic acid should be added immediately after the serum has separated from the clot, and the preparation is then filtered on sterilised cotton-wool, or allowed to decant in a refrigerator.

School.

The education question is only one aspect of the entire juvenile problem. It is not to be studied by itself, but in conjunction with such important factors as hygiene, home life, and, so far as is possible, the personal equation of each child in question. A contrast between our own haphazard methods of dealing with the training of the children of the poorer section of the community, and such as that now practised in the United States, reduces one almost to despair. The supervision of bodily health, and prompt rectification of minor disabilities, the efforts made to correlate the exertions demanded of each individual intellect with its own peculiar capacities, present such strong contrast to a cast-iron scheme which appears to regard a number of children congregated together akin to some such natural phenomenon as an autumnal flock of starlings. The merging of the individual in the community is an excellent preparation for adult civic life, but differential treatment, freely granted to such slight constitutions as those of flowers has also strong claims to be employed in the case of the young person. Merely to conform automatically to a fixed standard of dead knowledge should not be sufficient. To educate should comprise the development of mind and body in the true sense of development—should aim at popularising a type in whom mental and physical activities may be displayed as luting in joyful concord, to quote the felicitous words of George Meredith.

Medico-Social Work.

Every hospital physician or surgeon has felt how much his work suffers by his inability to keep in touch with his hospital patients once they have left his wards. An attempt to keep up a relation between a hospital and its past patients is being made in certain of the American hospitals, and an interesting account of the work done by the medico-social department of the Boston City Hospital is given in a recent number of the *Boston Medical Journal*. This department was started by

a committee of honorary workers whose duties were to visit patients after their discharge, to see that out-patients attended the dispensaries at regular intervals, and, where necessary, to make use of various charitable institutions on behalf of these patients. This visiting scheme is obviously of great use to the patients, particularly where hospitals are ill supplied with convalescent homes. The hospitals are benefitted in two ways: the patients may often be discharged sooner than would otherwise be possible, and the following up of these cases becomes a comparatively simple task. The importance of this work has been so fully realised that a number of other great hospitals in America have established medico-social departments, and it is stated that the financial support of the work may soon be undertaken by the hospital boards themselves. An extension of this scheme to our hospitals would be of great value. We all have to deplore the disappearance of our patients as soon as they are discharged, partly because we would like to see the after-effects of our treatment, and also because the treatment will often be of little avail if the patients return immediately to their former mode of life. When the war is over there will be thousands of women who have for the first time tasted the joys of regular occupation. Perhaps some members of the V.A.D.'s may take up this more prosaic work for the hospitals later on.

Greenock Doctors' Charges.

THE Greenock Trades' Council regret the action taken by the doctors in desiring to increase their charge for night calls. We like the flavour of politeness embodied in that blessed word "regret"; it is akin to the world of consolation in that blessed word "Mesopotamia." How dare these medical men, who have the wet, inestimable privilege of living in Greenock, ask for additional reward for night work? Every Greenock Black-squadder works for the same sum per hour by night as by day. Perhaps. I do not believe that the forbears of the Greenock Trades Council hanged the monkey. That's the tradition. The truth is, to judge from their descendants, they skinned the poor brute.

Principle and Practice.

"It has been decided to invest the funds of the Aberdeen University Peace Society in the War Loan. The funds, the greater part of which were presented by Mr. Andrew Carnegie in pre-war days, stand at present at £200 of stock and £50 in the bank, and the whole of this will be invested in the War Stock. The majority of the members of the society are on military service, including the president, who was called up at the outbreak of war."

There is something Gilbertian in this announcement in the *Glasgow Herald* regarding the proceedings of a Peace Society and its dealings with their funds given them by the great Pacificator, Dr. Carnegie. Yet the awful temptingness of a 5 per cent. investment with guarantees would move more than an Aberdonian to look kindly on war stock. I can quite understand the officials of the society taking up arms (good fortune attend them), because the radical treatment of the problem of most quickly restoring peace is to kill the opponent of peace as swiftly and, if possible, as kindly as circumstances will allow. Perge, puer, and if anybody says you are illogical, you have always by you your city's bludgeon for interfering persons—"They have said: What say they: Let them say."

DR. FRANCIS J. H. BATEMAN has been appointed a J.P. for the County of London.

PERSONAL.

MR. GEO. E. BEAUMONT, B.A., University College, Oxford, has been elected to a Radcliffe Travelling Fellowship.

DR. JAMES HARRISON has received a handsome gift of silver plate from his pupils of the North Shields Nursing Division.

MR. S. W. COLE, M.A., of Trinity College, has been appointed University Lecturer in Medical Chemistry at Cambridge.

SIR A. H. KEOGH, Director-General of the Army Medical Department, has been admitted to the freedom of the City of London.

MAJOR MICHAEL J. MAHONEY, M.D., R.A.M.C., attached to the King's (Liverpool Regiment), has received the Territorial decoration.

THE Scottish Red Cross has completed at Glasgow its first hospital ship for the Mediterranean service. The vessel has been named *St. Margaret of Scotland.*

MR. JAMES BERRY, F.R.C.S., who was taken prisoner in Serbia by the Austrians in November last, whilst in charge of an ambulance unit, has cabled that he has been liberated and is on his way home.

DR. W. W. KEEN, of Philadelphia, the well-known American surgeon, who is Emeritus Professor of Surgery in Jefferson Medical College, has been re-elected president for 1916, of the American Philosophical Society.

THE council of the Royal College of Surgeons have appointed Lieut.-Colonel C. J. Symonds, F.R.C.S., who is serving as a Surgeon to the Mediterranean Expeditionary Forces, to be the Bradshaw Lecturer for the ensuing collegiate year.

DR. T. J. HORDER is at present acting as medical adviser in London to the Anglo-Russian Hospital in Petrograd. He has been unable to join the staff of the hospital in the Russian capital, on account of the absence of Colonel A. E. Garrod, A.M.S.

COL. JAMES MONTGOMERY, C.S.I., has been appointed Red Cross Commissioner for British East Africa. The appointment is made by the Joint Committee of the British Red Cross Society and the Order of St. John, with the approval of the War Office.

SIR ST. CLAIR THOMSON, M.D., the Medical Society of London Orator for the year, has selected for his subject "Shakespeare and Medicine," and this year being the Tercentenary of Shakespeare, it will be of special interest. The date fixed is Monday, May 1st, so as to bring it in line with the official Shakespearian celebrations.

SIR GEORGE NEWMAN has resigned his post as Lecturer on Public Health at St. Bartholomew's Hospital owing to pressure of duties as Chief Medical Officer of the Board of Education. The vacancy has been filled by Dr. R. A. Lyster, of The Castle, Winchester, the Lecturer on Forensic Medicine at the hospital.

WE are very pleased to notice the appointment of Dr. John Gilchrist as Oculist to the Victorian Eye Infirmary, Paisley, in succession to Dr. Cluckie, who has resigned after twenty-six years' yeoman service. Dr. Gilchrist is one of the capable younger oculists of Glasgow, and will be a worthy successor in the post now vacated. In addition to his large experience in eye diseases, he has been in Stobhill Military Hospital during the past year, getting varied experiences and acquiring merit in extra-ocular domains. We congratulate him heartily on his appointment.

ORIGINAL PAPERS.

ON FÆCAL FISTULA OF THE ABDOMEN.

By RUSHTON PARKER, M.B., B.S., F.R.C.S.,

Professor of Surgery in the University of Liverpool; Lieut.-Col., 1st Western General Hospital, R.A.M.C. (T.F.).

Fæcal fistula of the abdomen can often only be remedied by operation, and a case in point is here related. But all cases do not require operation; in fact, most of those I have met with, having been slight cases arising under my own observation, and capable of being taken in hand before they have become chronic, have closed spontaneously when treated by a reduction of diet to broth, arrowroot, or other similar trifles that produce little or no waste, gas, or other source of intestinal distension.

One somewhat different was that of a youth admitted into hospital having a dozen or more abdominal fistulæ. The case was one of typhoid, mild no doubt, but said to have been treated at home, walking about, and fed on meat and potatoes! Some of the fistulæ were discharging fæces, others pus, and all were judged to be perforations of small intestine. The patient was now fed chiefly on beef tea, and the affected skin was covered with waterproof tissue, daily cleansed and re-applied under a draw-sheet. The sinuses discharging pus soon discharged only serum, those discharging fæces gradually discharged only pus and eventually serum, followed in every case by drying-up. The patient completely recovered, and never seemed to have been seriously ill at any stage of his malady. This is the principle on which I have always treated the few fæcal fistulæ of the abdomen that occurred now and then after operation and reduction of strangulated hernia. One such case, in a woman, discharged through a stitch-hole after umbilical herniotomy. Nothing was done beyond reducing the diet as above described, and washing away the fæcal discharge at the changes of dressing. In this and every case that I can remember the fistula dried up and got well.

Another case caused me much disappointment and anxiety for a time, being a left inguinal herniotomy, for the radical cure, in a healthy male private patient of 72, in July, 1894. The operation wound had practically healed in three days, but later an abscess formed, which was opened three weeks after the herniotomy operation, and became a fæcal fistula ten days later. This took nearly two months to dry up, but did so completely, thanks to the willing co-operation of the patient, who fasted courageously the whole time. The patient lived an active and healthy life, free from hernia and impulse at the scar, and only died in his 90th year. Why the fistula occurred I never knew, but could only imagine that, by some mishap in passing Macewen's blunt hernia needle, with the suture to attach the folded hernial sac to the inner side of the abdominal wall, a piece of bowel, or mesocolon close to the bowel, had been inadvertently perforated. In the other cases the fitula probably occurred through ulceration of bowel at the part nipped in the strangulation; but in the last, not only was there no strangulation, but the hernial contents were omentum only.

Case Treated by Operation.

A married woman, æt. 34, was submitted to median abdominal section by Dr. E. T. Davies at the Samaritan Hospital, Liverpool, in January, 1903, for severe pain in the left groin and hypogastrium. He removed the left ovary, which appeared to be tuberculous, with matted appendages, closely adherent to the upper rectum. The patient was relieved of her pain and most of the wound healed well; but a fæcal fistula formed in it and persisted till the following May, when Dr. Davies transferred her to my care at the Liverpool Royal Infirmary. At this time fæcal liquid issued from the fistula, but nothing from the anus except when she took opening medicine.

On May 25th, 1903, after having had fæces washed out of the rectum, I performed left inguinal colotomy, the sigmoid flexure being attached unopened round the wound. At this operation the position of the fistula was found to be on the front of the upper rectum, at the pelvic brim, as previously ascertained by Dr. Davies. Nine days later the colon in the wound was laid open, flatus issuing. Fæces continued to reach the rectum, which was cleared by enemata from time to time. A fortnight after the colotomy the old fistula in the median scar was scraped and packed with gauze. By July 20th most of the fæces issued by the opening in the colon, and the old fistula was found to be closing. On November 10th the superficial part of this fistula was laid open, scraped, and treated with pure liquid carbolic acid, washed off again with spirit. A fistula of the small intestine was also found, scraped, carbolised, and closed with sutures. By the end of January, 1904, nothing but a small sinus remained of the old fistula, and some fæces now all the time reached the rectum. On February 8th this sinus was scraped and carbolised, also the edges of the colotomy opening, after which the bowel was detached from the integuments, re-united by suture, and dropped into the deep parts of the wound, which latter was dressed with a glass tube and gauze pack. No further fæces issued from the front of the abdomen, and she went home on March 8th, 1904, wearing a small dressing. A fortnight later healing was completed on the issue of a stitch. She continued well, and was seen a year later all right.

On November 3rd, 1915, Dr. Davies sent her to see me, and she was found in every respect well, the scars being white and recessed, and no protrusion anywhere on coughing.

Mrs. Maria Long, Mother of Captain R. W. Long, R.A.M.C., Queenstown, died on March 13th, at her son's residence, Kilva, three miles from Midleton, aged one hundred and four years. She retained her faculties in full to the end.

Dr. Thomas Bushby, M.B., C.M., M.R.C.P., of 47, Rodney Street, Liverpool, assistant physician to the Liverpool Hospital for Diseases of the Chest, hon. physician to the David Lewis Northern Hospital, lecturer on and examiner in clinical medicine at the University of Liverpool, left estate valued at £4,967 17s. 4d. gross, with net personalty £4,897 4s. 3d.

THE NORMAL STOMACH: ITS SIZE, POSITION, FORM, TONE, PERISTALSIS, AND MOBILITY FROM A RADIOGRAPHIC STANDPOINT.*

By C. WINFIELD PERKINS, M.D.,
New York.

DR. JOHN B. DEAVER, the noted surgeon, in his splendid *Anatomy*, describes the stomach as the most dilated part of the alimentary canal, situated in the left hypochondriac and epigastric region, between the œsophagus and the small intestine, and retained in position by the œsophagus and by reflections of the peritoneum. The more capacious extremity of the stomach, which is directed toward the left side of the body, is the cardiac end; the narrow extremity, which is directed toward the pyloric side, is the pyloric end; and the intermediate portion is the body of the stomach. The portion of the cardiac end projecting to the left beyond the œsophagus is the fundus, or great cul-de-sac of the stomach and the slight dilatation of the stomach at the pyloric end is the antrum of the pylorus or the lesser cul-de-sac. The stomach has an anterior and a posterior surface. These surfaces are somewhat crescentic in shape. The upper and the shorter margin of the stomach is the lesser curvature and the lower border is the greater curvature. The part of the stomach occupying the left hypochondriac region is the cardiac end of the stomach and the body, three-fourths of the organ being in that region. The portion of the stomach occupying

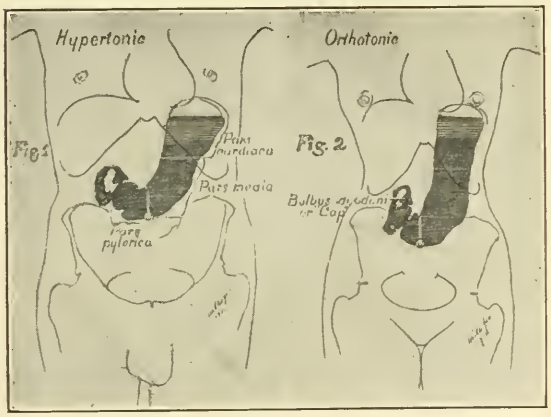

FIG. 1 illustrates the hypertonic type of stomach with its anatomical subdivisions, pars cardia, pars media, and pars pylorica.

FIG. 2 illustrates the orthotonic type of stomach with the filled bulbus duodeni, frequently called "cap," having a similarity to the Liberty cap of the French Revolution. (Drawings after Mills.)

the epigastric region is the pyloric end, and is in contact with the under surface of the liver.

Such is the anatomy of the operating room and the *post-mortem* table. Radiography has given us an entirely new anatomy, that of the living in a normal functioning capacity, and it is my desire in this paper to show the normal position and physiological action of the stomach in comparison with the old anatomical viewpoint. Two types of stomach are in existence (Haudeck's classification), the steer horn and the fish-hook. The "steer horn," as the name implies, resembles a horn of the steer, having a broad base and a narrowing toward the pylorus. Its axis is always oblique in the abdomen. This type is comparatively rare and is usually associated with deep-chested and muscular men and rarely found in women. The common type is the fish-hook or J type. Its axis is vertical and it is found in nearly all women and many men. Tonus is the ability of the stomach to hold its contents firmly. Stomachs are classified by Schlesinger according to the tone, as hypertonic, orthotonic, hypotonic, atonic, or subtonic. The hypertonic is the steer-horn type, the orthotonic the fish-hook or J type, and the hypotonic is broad at its base and the bismuth meal usually settles down, leaving the upper portion partially relaxed. The atonic or subtonic stomach hangs like a loose bag well down into the pelvis with the pars media and the pars cardia collapsed.

The capacity of the normal stomach ranges from twenty-four to thirty ounces, any departure from this being usually abnormal. The only positive fixed point of the stomach is the cardia; the other points or portions should be freely movable on palpation under the fluorescent screen. The gastric outline is smooth and regular. A slight indenture may often be noticed below the cardia, due to the spleen, and should not be mistaken for a deformity; a deeper depression is observed at the pylorus or antrum of the pylorus and also by the peristaltic waves. A peristaltic wave usually begins at the pars media and becomes deeper as it advances toward the pylorus. The wave is always more pronounced on the lesser curvature than on the greater. At the pyloric end it disappears and the food passes into the pars ascendens of the duodenum, usually outlining the bulbus duodeni. This is called a stomach cycle, a functional process that begins over again in the normal stomach in from fifteen to twenty seconds.

Following is the report of the examination of fifty-eight normal stomachs radiographed in the vertical position filled with the bismuth meal (buttermilk and bismuth subcarbonate): Twenty-eight in females, ages from twelve to eighty-two years, thirty in males, ages from seventeen to sixty-six years, or fifty-eight cases in all. Types of stomachs found, males, hypertonic 5, orthotonic 22, two with hypotonic tendency, hypotonic 1. Females, hypertonic 3, orthotonic 13, hypotonic 12. The tendency of the male stomach is therefore toward hypertonicity, while that of the female is toward hypotonicity.

The axis of the stomach is the direction or position of the stomach in relation to the median line.

All the hypertonic stomachs had the axis oblique; thirty orthotonic stomachs had the axis vertical; nine orthotonic stomachs had the axis oblique; ten hypotonic stomachs had the axis vertical; one hypotonic stomach had the axis oblique. The average normal axis of the stomach is, therefore, vertical and parallel to the median line, but it sometimes may be slightly oblique.

We shall now discuss the position of the lowest point of the greater curvature in its relation to the interspinous line; the umbilicus is no longer used as a point of measurement, as it does not remain in a fixed position under the influence of various postures. Thirteen stomachs of the orthotonic type averaged from one to four inches above the interspinous line and from one to two inches to the left of the median line. In nine of the orthotonic type the greater curvature (lowest point) averaged one to two inches below the interspinous line and one to two inches to the left of the median line. In four cases the lowest point of the greater curvature was on the level with the line and one inch to the left. In seven cases the lowest point was above one and one-half inch and median in position. One stomach of the orthotonic type was one inch above the line and one inch to the right. In one case the greater curvature (lowest point) was one inch below and

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one inch to the right. Therefore the position of the greater curvature (lowest point) in the orthotonic type of stomach may be from one to four inches above, at the same level as, or one to two inches below the interspinous line and one to two inches to the left.

The lowest point of the lesser curvature of the orthotonic stomach in relation to the same line was as follows: In twenty-seven cases it averaged from

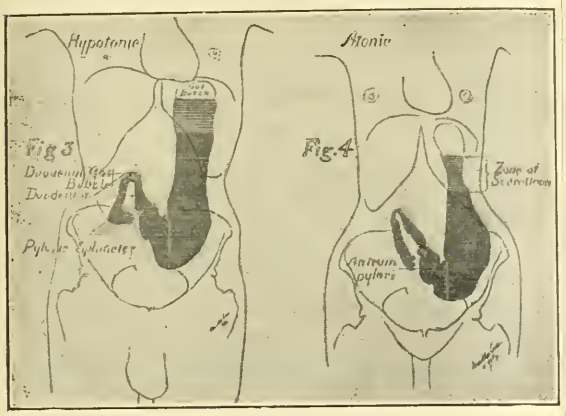

Fig. 3 illustrates the hypotonic stomach with *Magen Blase* or gas bubble in the cardia, pyloric sphincter, pars ascendens, in the duodenum, and descending portion of the latter.

Fig. 4 illustrates the atonic or subtonic type of stomach, with zone of secretions, and pyloric antrum. (Drawings after Mills.)

one quarter to six and a half inches above the line and one quarter to two and a half inches to the left; in nine cases the lowest point of the lesser curvature was in the median line; in two cases the lowest point two and a half inches above and one-half inch to the right; in one case the lowest point was at the level and to the left. The average position of the lesser curvature in the orthotonic type of stomach may be from one to six inches above the interspinous line and is usually to the left of the median line.

The position of the greater curvature (lowest point) in the hypertonic stomach was as follows: In four cases the lowest point of the greater curvature was from three to four and a half inches above the line and from one to two inches to the right of the median line; in one case the lowest point was to the left; in three cases the lowest point was two and a half inches above the line and situated in the median line. Therefore, the lowest point of the greater curvature in the hypertonic stomach is usually three to four inches above the interspinous line and one to two inches to the right.

The lowest point of the lesser curvature in the hypertonic stomach was as follows: In eight cases the lowest point was placed from two and a half to seven and three-quarter inches above the line and from one to three inches to the right of the median line.

The position of the lowest point of the greater curvature in the hypertonic type of stomach averaged in ten cases from three-quarters of an inch to three and a-half inches below the line and one to two inches to the left of the median line. In one case it was in the median line at the level of the interspinous line. The average position of the lowest point of the greater curvature in the hypotonic variety of stomach is, therefore, from one to three inches below the line and from one to two inches to the left of the median line.

The position of the lesser curvature in the hypotonic stomach in eight cases averaged from one-half inch to two and a half inches above the interspinous line and from one-half to one and a-half inch to the left. In one case the lesser curvature was at the level of the line; in two cases the lesser curvature was at the level and placed in the median line; in one case the lesser curvature was three-quarters of an inch below the line and to the left.

We shall now discuss the relative position of the pylorus, in the orthotonic stomach where the interspinous line is taken as the point of measurement (the measurement was taken at the first portion of the pars pylorica and not precisely at the pyloric ring) was as follows: In twenty-five cases the pylorus was from four and a-half inches to one and a-half inch above and from one to three inches to the right of the median line; in twelve cases the pylorus was placed from two to four inches above the interspinous line and in the median line; in three cases the pylorus was to the left of the median line and from two to three inches above the interspinous line. Therefore, in the orthotonic stomach the average position of the pylorus is from two to four inches above the interspinous line and one and a-half inch to the right or in the median line.

The position of the pylorus in the hypertonic stomach was as follows: In eight cases the pylorus averaged three inches above the interspinous line and from one to three and a-half inches to the right.

The situation of the pylorus in the hypotonic stomach was, in eight cases, two inches above and

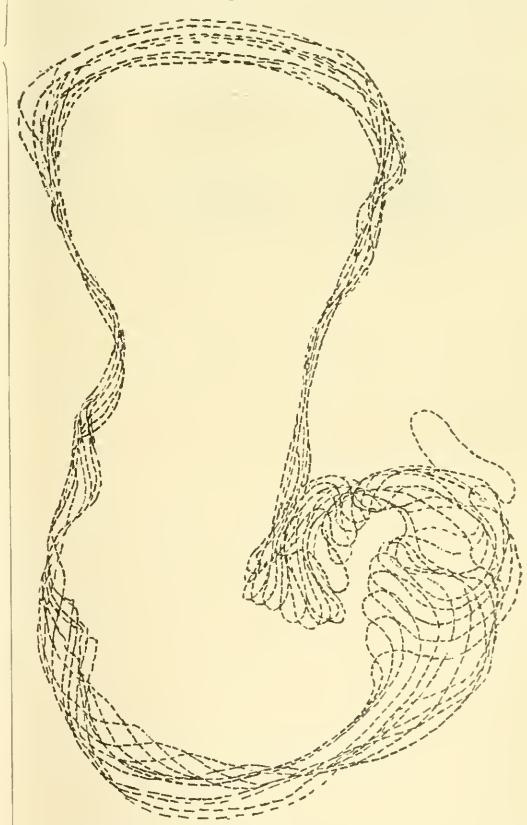

Fig. 5.—Typical peristaltic rhythm of the stomach (after Reider and Groedel).

from one-half to three inches to the right; in three cases, two inches above and in the median line; in one case two inches above and one inch to the left. The situation of the pylorus in the hypotonic stomach should be, therefore, from one to two inches above the interspinous line, in the median

line, or about one inch to the right of the median line.

The length and diameter of the three types of stomach were found to be:—

Orthotonic stomach.—In thirty-five cases the length was six and a-half to twelve inches with an average of eight to ten inches; in thirty-five cases the diameter was two and a-half to seven and a-half inches or an average of three to three and a-half inches.

Hypertonic stomach.—In eight cases this averaged seven to ten inches in length, and three and a-half to four and a-half inches in diameter.

Hypotonic stomach.—In thirteen cases it averaged eight and a half to thirteen inches in length. The general average was eleven to thirteen inches. The diameter in the same cases was from two and three-quarters to three and one-quarter inches.

As to the tonus of the different types, in the ortho-

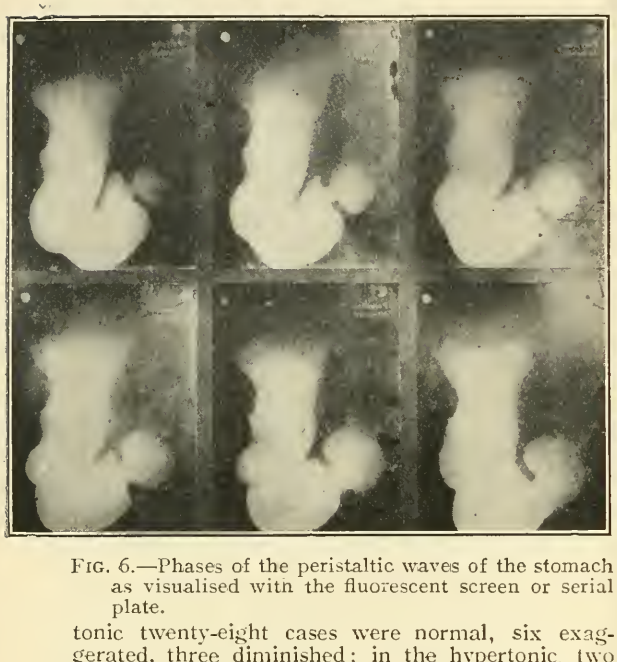

FIG. 6.—Phases of the peristaltic waves of the stomach as visualised with the fluorescent screen or serial plate.

tonic twenty-eight cases were normal, six exaggerated, three diminished; in the hypertonic, two cases were normal, six cases increased and in the hypotonic, three cases were normal, ten cases diminished.

CONCLUSIONS.

Peristalsis does not seem to exert any influence on the tone of the stomach, for we may have exaggerated peristalsis with a hypotonic stomach and diminished peristalsis in a hypertonic stomach.

There are no determined fixed points of any type of stomach in the abdominal cavity, except the cardiac portion.

A stomach may be of any of the types and yet be normal from an X-ray standpoint.

The average normal stomach is orthotonic. The usual position of the orthotonic stomach is as follows: Greater curvature (lowest point) one to two inches above the interspinous line, either median or to the left; lesser curvature (lowest point) three to four inches above the same line, median or one to two inches to the right.

The pylorus is placed two or three inches above the line, in the median position, or one and a-half inch to the right.

The axis of the stomach is vertical and parallel to the median line.

The length is eight to ten inches and the width three to three and a-half inches.

The tendency of the male stomach is always toward hypertonicity, while that of the female is toward hypotonicity.

The stomach is not, as a rule, as high in the abdominal cavity as many textbooks of anatomy teach. There is no structure in the human body, however, that has such variations in form, tone, and position.

The radiographic examination, either by the fluorescent screen or plate, is the only accurate method of ascertaining the anatomical position, form, peristalsis, and mobility of the stomach. Therefore, revolving in mind that the type of stomach fits the patient, a chart of the relative positions of the stomach should be of service to the clinical diagnostician in locating pathological lesions of the organ; that is, if he has not X-ray methods at hand. Such a chart should also be of service to the radiological technician in locating points for radiographic work.

The examinations and accompanying radiographs were made in the röntgenological department of the Post-Graduate Hospital, and I desire to express my appreciation to Professor Hirsch, who is in charge of the laboratory, for his valuable suggestions.

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PLUMBISM AND BRIGHT'S DISEASE.

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[SPECIALLY REPORTED FOR THIS JOURNAL.]

A MAN, forty years of age, was admitted to hospital complaining of abdominal and lumbar pain. By way of antecedents he remembers having had scarlatina and articular rheumatism at the age of seven, and it is to be noted that from the age of 16 he became a house painter. He is married, his wife has had six children and one miscarriage at about the fifth month. He has had several well-marked attacks of lead colic, the first when 27 years of age, for which he remained under treatment at the hospital for a fortnight; a second at 31 years of age, and a third, not so severe as the previous ones, at 33. He has since continued his calling.

A year and a half ago he again had to take to his bed, on this occasion for very sharp pain in the joints of the toes, especially the big toe. The doctor whom he called in had no hesitation in diagnosing "saturnine gout." He had the urine analysed and found a good deal of albumen, so the patient was put on a lacto-vegetarian diet and theobromine.

Since that date the patient has been suffering from general lassitude and indisposition to work, with œdema of the legs which disappears during the night, lumbar ache and troublesome cramps. Since that time, too, he has been troubled by dysuria, micturition entailing an effort, and he passes barely two pints of urine in the twenty-four hours.

The slightest effort causes shortness of breath with palpitation and sharp pain in the precordial region with a distressing feeling over the phrenic spot, opposite the intersection of the external margin of the rectus and the tenth rib. Then, too, he has been losing flesh.

Lastly, he was a month in hospital under the care of Dr. Oettinger, in September last, when he was given digitalis which greatly relieved him. The blood was examined in respect of urea, which was found to be present to the extent of upwards of one gramme per litre.

He was discharged from hospital but was obliged to return a few days later, and now, after a fresh period outside, he returns to us with the symptoms set forth above.

When we look at him he is seen to be anæmic, his face is puffy and the features are drawn. He is in a state of perpetual torpor. Examination of the eyes shows slight yellowness of the conjunctivæ, but nothing amiss with the pupils.

He is short-winded and his tongue is coated. He has lost his appetite and constantly suffers from nausea with occasional vomiting.

On uncovering the abdomen we find that it is distended, tympanitic, hard on palpation and tender. In the dependent parts, in the flanks, there is partial dulness testifying to the presence of free ascites which shifts its level when he turns on his side.

He also complains of painful attacks of diarrhœa —six or seven stools a day, and these attacks alternate with refractory constipation.

The liver does not come below the margin of the false ribs, but the spleen is enlarged and the liver is tender.

The legs are slightly œdematous over two-thirds of their surface.

Analysis of the urine shows 1 gm. 25 albumen per litre. The urine is pale, frothy, scanty and contains 2.25 grammes of urea to the litre.

Turning to the circulatory apparatus we find that his pulse is hard and the arteries tortuous and resistant. The blood pressure oscillates between 250 and 150 mm. On auscultation we hear the systolic murmur of mitral insufficiency and the lowering of the apex shows ventricular hypertrophy. Lastly, we note undulatory movements over the cardiac region suggestive of pericardiac symphysis.

In the lungs there is partial dulness over the right base corresponding to slight effusion into the pleura.

This patient, as you see, presents a complex symptomatology—he is the subject of lead poisoning, he has heart disease, and he has kidney disease, but the predominant feature is the renal disease, to which the gravity of his case is due.

I may recall that in the course of his plumbic symptoms the patient had an attack of saturnine gout. This fact is interesting enough in itself to fix our attention, because instances of this form of gout are by no means common.

Now it is often a matter of difficulty to ascertain how a given patient has become the subject of Bright's disease. We find that he has renal disease, but the cause escapes us. In this case, however, the origin of the disease is as plain as possible —it is of plumbic origin. He has been handling lead ever since he was 16 years of age, and he has handled it in a particularly dangerous form, in that he had to manipulate white lead. He has had three attacks of lead colic, yet he has had no paralysis—the commonest manifestation of lead poisoning. Since, however, he has displayed another manifestation, vastly more interesting than radial paralysis—viz., an attack of gout localised in the left big toe.

Saturnine gout differs in no particular respect from ordinary spontaneous gout; its course and its distribution are the same—in fact it only differs in respect of the cause. This patient does not come of a gouty stock, and he has not been a big meat eater. He had his attack of saturnine gout late in life—in fact only eighteen months ago. It came on suddenly and violently, just like ordinary gout, lasted a fortnight and then subsided, leaving behind it certain vague pains that recur from time to time.

Gout may be due to auto-intoxication or to hetero-intoxication, such as lead poisoning, but it is the same gout however caused. A patient who suffers from saturnine gout must therefore be described as having a gouty diathesis.

True spontaneous gout is rarely seen in hospital, simply because our hospital patients do not lead the lives of certain of our private patients, more particularly they are not addicted to a diet rich in meat. On the other hand, the over-fed, rich town dweller does not compensate for his carnivorous habits by adequate expenditure of energy in the shape of physical exercise.

But everyone who fails to burn up his food does not become gouty, because something else is required for the production of gout—viz., the uricæmic soil. Given this soil, then over-indulgence in meat and insufficient exercise will culminate in an attack of gout. The same remark applies to plumbism, which is a cause of gout on all fours with over-indulgence in meat. Plumbism, however, does not always cause gout; on the contrary, plumbic gout is quite exceptional.

Now, this patient was unquestionably predisposed to gout. We may safely assert that if his habits of life had taken the direction of over-indulgence in meat and in abstention from physical exercise he would have had gout quite apart from any lead poisoning. These cases of saturnine gout prove that the influence of a toxic cause such as lead will, in certain subjects, determine an attack of gout, and we are driven to the conclusion that there is a particular soil which predisposes to attacks of gout. Not everyone can become gouty. Plumbic intoxication may be the cause in one instance and over-feeding in another, but this action is only manifested in predisposed subjects.

Now, this patient, at first sight, does not appear to correpond to this description of predisposed persons, for he has lost weight though it is easy to see that he must have been at one time fairly corpulent.

His form of gout suggested an examination of the urine, and we found 1 gramme of albumen per litre. This albuminuria explains certain of his symptoms, such as his shortness of breath, his palpitation and the œdema of the legs. It also explains his headache, for this plumbic headache, which used to be described as a special symptom, is merely a sign of Bright's disease.

We found a heightened blood pressure and a little chloride retention as shown by the œdema. The blood serum contains 2 gm. 27 of urea per litre, so that he is azotæmic in the third degree. It is interesting to note that in September there was only 1 gramme of urea, so his azotæmia is evidently progressive. This point is of considerable importance, because on it turns the prognosis. In these progressive cases we must apprehend a fatal termination within a few months. With 1 gramme the prospect of life may be extended to eighteen months or two years.

Just as he is cardiac because he had acute articular rheumatism in childhood so he is renal because he has dabbled in lead ever since he was 16 years of age. His lead poisoning revealed itself by attacks of lead colic and saturnine gout.

As for treatment, this comprises a diet containing little salt and not much meat. He is to take gr. xv. a day of theobromine and m. xx. of tincture

of squill morning and evening. Theobromine, as you are aware, possesses valuable diuretic properties which, in this case, will afford great relief, but it is useless to disguise the fact that the outlook is unpromising, whatever treatment we adopt.

CHRONIC URETHRITIS, GONORRHŒAL AND POSTGONORRHŒAL: A PLEA FOR ITS CLOSER STUDY.*

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Of all affections in the domain of minor urology, that of chronic urethritis stands out pre-eminently as the one which is most trying to the skill and patience of the urologist. Ricord (1) advisedly stated that we know when a specific urethritis begins, but only the Almighty knows when it ends. It is astounding to find so large a number of patients who, for reasons to be considered hereafter, have passed into a chronic state, and because of failure to procure proper therapeutic measures, have become indifferent about their condition and have despairingly abandoned treatment.

My reasons for writing this paper are twofold: First, to arouse a deeper interest among urologists in the subject of chronic urethritis, and, secondly, to impress on the general practitioner that chronic urethritis is by no means a simple affection that will either take care of itself, or end in recovery by the aid of those who are not specially trained in this branch of medicine.

The necessity of the former reason for writing this paper manifests itself when we consider how few are the papers that are read at our section meetings and what lack of consideration is given to this widely prevailing affection. The latter reason—*i.e.*, to impress on the general practitioner how serious a malady chronic urethritis is, will be well understood when we investigate the disastrous effects brought upon the community by improperly cured patients (2).

When is a case considered to be chronic? Casper (3) and others are of the opinion that when a case of acute specific urethritis does not show any tendency toward abatement at the end of the sixth week, it may be said to have passed into the chronic state.

Ætiology.—In order to have a clear understanding of the subject, it is advisable to consider the many ætiological factors that are in varied degrees responsible for this malady. These may properly be divided into causes of local and those of general origin. Among the latter, too irritating or strong injections used during the acute state prolongs the existence of the discharge and finally causes it to pass into the chronic state. It is not uncommon to find patients who have been advised by friends to procure protargol or similar salts, without the physician's prescription or directions for its use. The usual result is that they procure a solution which is from four to eight times stronger than would do good. Then there are patients who do not abstain from sexual intercourse during the course of treatment, because, as they put it, "things come their way" and it is hard to let them pass. Others say that the wife insists upon coitus irrespective of the outcome. The third group of patients of this class simply become freshly reinfected before the previous attack is eradicated. We frequently meet in the clinics patients who cease treatment and consider themselves cured as soon as the discharge is no longer visible at the external meatus, but to their great disappointment they find that they have erred in their diagnosis and this manifests itself soon after their first indulgence in venery or in alcoholic debauchery. Physical exertion we found to be a repeated factor. Thus, patients whose occupation compels them to walk the greater part of the day or otherwise to be physically active, present invariably protracted cases. For instance, there are patients who get on well when under treatment and a cure is not far off until they attend a dance usually lasting into the early hours of the morning, with the usual effect of not only a setback in the progress of the case, but also of an involvement of the posterior urethra.

Misdirected treatment is perhaps more frequently the cause than all others causes combined (4). Patients are frequently advised to procure a hand syringe for anterior injections, but are not instructed as to its capacity. The result is that they usually procure one that is much too large. This brings about repeated trauma by dilating the acutely inflamed and infiltrated urethra. Intemperance and various debilitating constitutional diseases are among other causes of general origin.

The local causes are as follows: *A narrow meatus.* This condition exists in a large number of patients and its presence prevents free drainage of the continually formed pus in acute urethritis. *Phimosis*, on the other hand, makes it impossible for the patient to carry out proper injections. *Stricture* of the urethra, either congenital or acquired from previous attacks of urethritis, has the same effect as a narrow meatus and is a typical cause of persistency. The existence of *a soft infiltration in the anterior urethra* or a *lacunitis* as well as *patches of abrasion* of the mucous lining of the urethra, especially in the bulb, are further causes. *Paraurethral involvement*, particularly of the glands of Tyson, may prolong a case indefinitely. Finally, *involvement of the prostate* plays an important *rôle* in chronic urethritis and Casper states it to be responsible for eighty-five per cent. of cases (5).

Bacteriology.—The gonococcus is the underlying cause. When superficially lodged in the urethra it can be easily destroyed when brought in contact with any of the antiseptics at our disposal; but when it penetrates the mucosa into the submucous layer, or when it entrenches itself in any of the glandular annexa that directly communicate with the lumen of the urethra, then the urologist has no easy task to dislodge it. However, Neisser's diplococci appear to die out after a number of months or years and thus convert the gonorrhœal into a postgonorrhœal urethritis.

Secondary infection (6). In many instances the discharge and the filaments contain numerous micro-organisms, either alone or in association with the gonococcus. These are streptococci, staphylococci, bacillus coli, and frequently also a short, thick rod-shaped bacillus appearing in chains. There is a variety of mixed infection in which there exists some relation between the different germs in the sense that one precedes the other and prepares the soil for its fructification. Taking pneumonia as an instance, under the influence of the pneumococcus the pulmonary alveoli lose their epithelium, which is thrown off as exudate and serves as a medium for the tubercle bacillus or other pyogenic germ (6).

Keyes, after considerable study, came to the conclusion that the gonococcus does not live longer than three years in the male urethra (7). The frequency with which gonococci are found in chronic urethritis varies. Thus, Scholtz found them to be present in ten per cent. of cases, while Casper found them in five to six per cent. Brauser found gonococci in ten cases out of a series of 163 (8). I

* Read before the Eastern Medical Society, November 12th, 1915.

have found gonococci in the prostatic smear six years after the original infection and after a seminal vesiculotomy was performed for gonorrhœal seminal vesiculitis. It would be difficult, however, to state whether the patient was not continually reinfected from his wife at more recent dates, although she was considered to be well.

Infectiousness. The absence of gonococci in a scanty smear or in the filaments does not necessarily exclude their presence somewhere in the genito-urinary tract. As stated, they may be hidden in any of the glandular annexa. Hence it may be necessary to cause irritation of the urethra in order to bring the gonococci to the surface. This is brought about either by injecting into the urethra a strong solution of silver nitrate one to 1,000 or one in 2,000, or by the patient's liberal use of beer or other alcoholic liquor on the day prior to the examination. Coitus, while not recommended as a means of irritation, has the same effect in bringing some of the gonococci to the surface. Women who are affected with a latent form of gonorrhœa may not transmit the infection to men to whom they are indifferent during cohabitation, but when the act is performed with a male who pleases her and who is capable of arousing a strong orgasm, it causes a copious secretion of the infected glands, which thus empty their infected contents and expose the partner to infection. Smears of the prostate and vesicles are of paramount importance, not only for search for Neisser's diplococci, but also for pus cells and other micro-organisms. Finger's (9) teachings, which have been accepted by many renowned authorities, are of interest. He holds every case infectious so long as the smear shows the presence of numerous leucocytes, which is an indication that an active inflammatory process is still in progress, even though gonococci cannot be demonstrated. Finger further insists that the following examinations must be resorted to in order to determine the presence or absence of infection: *a*, Daily microscopic examinations of the smear and filaments for from two to four weeks; *b*, there must be absence of pus cells from smear; *c*, absence of gonococci from a provoked discharge; *d*, absence of pus cells and gonococci from the prostatic and semino-vesicular secretions.

Kopp (8) reported seven male patients who had been microscopically examined from sixteen to twenty-two times with negative results, yet all infected their wives soon after marriage. Finger and Tauton had patients in whom repeated examinations by all known methods failed to reveal the presence of gonococci, but soon after a single dilatation gonococci appeared in the discharge. The writer has had similar experiences. Patients affected with chronic urethritis frequently call at the office or clinic with a laboratory report in their pocket stating "negative for gonococci." The patient, as well as his family physician, accepts this to mean that he is free from infection, but the foregoing laborious investigations plainly show what a folly it is to give such an interpretation thereto.

Pathology.—The pathology of chronic urethritis can be best understood when traced back to the very incipiency of the infection. When the gonococcus is lodged in the male urethra, it remains dormant for a time (incubation period). Then it begins to penetrate the epithelium of the mucous membrane, working its way into the submucous coat. The leucocytes begin to extravasate by diapedesis from the blood-vessels of the invaded tissue and travel toward the surface of the urethra, and at once a combat begins between them and the gonococci, thus causing a purulent discharge which consists mainly of numerous dead leucocytes having in their body substance many gonococci. Incidentally the irritation caused by the gonococcus and its toxins brings about a round cell infiltration into the submucous coat, and it is at this point that we reach the parting of the ways. If the acute urethritis goes on toward recovery, regeneration takes place with absorption of the infiltrated cells. If, however, for any reason the irritation persists and the case passes into the chronic state, then the round cell infiltration becomes organised into a permanent structure simulating connective tissue with its usual property of contraction. This newly formed tissue undergoes further changes so that it ultimately resembles dense scar tissue, although not as a consequence of ulceration (10), but rather of hyperplasia. While the process is at first subepithelial only, later it penetrates deeper until it reaches the corpus cavernosum.

The intensity of the infiltration and the ultimate degree of contraction of the newly formed tissue are both responsible for the many other varied pathological changes that are found in the urethra. The shrinkage of this tissue around the lacunæ pushes them outward toward the lumen or causes their complete atrophy by the surrounding pressure. Littré's glands undergo similar changes. The foregoing changes take place in the pars anterior, but the posterior urethra may undergo similar changes in addition to the following: The colliculus may become markedly enlarged and in many cases may contain numerous small vegetations so that it assumes a raspberry-like appearance. The ejaculatory ducts may become sclerosed at their openings on the floor of the prostatic urethra, causing mechanical obstruction to ejaculation, which explains the cause of sticking pain during that act. The ducts may, as a result, become transformed into numerous diverticula which do not empty themselves during ejaculation; the result is the occurrence of spermatorrhœa brought on with each defection.

Diagnosis.—Since the failure to localise the focus of disease is largely responsible for the persistence of the lesion (11), it becomes self evident how important it is to determine the exact cause in each case. After a careful history is procured in reference to previous infections, as well as to the mode of treatment of the actual instance, the following examinations should be made.

1. The discharge. This should be repeatedly examined for, *a*, gonococci, *b*, other micro-organisms, *c*, leucocytes as well as their preponderance over epithelial cells. As pointed out above, one or two examinations with negative findings for gonococci should not be considered conclusive. A further search should be made after provocative measures had been resorted to, to bring on an artificial discharge. This can be accomplished by injecting silver nitrate solution one in 1,000 or one in 2,000 and the resulting discharge is examined from three to six hours later.

2. The filaments. The filaments should be spread out on a glass slide with the aid of a platinum wire, and after being properly stained, should be examined microscopically. One should look for leucocytes and gonococci. When they consist of epithelial cells, they may be considered as remains of a postgonorrhœal process.

3. The appearance of the urine is of considerable help, although filaments in the first glass and none in the second do not necessarily mean that the anterior urethra alone is diseased and that the posterior is free from disease. The various glass tests are so ably described in the standard works on urology, that we shall omit them here. Increased frequency will often point to involvment of the colliculus or the prostate, hereafter to be considered.

The meatus should be inspected as to its size and also whether Tyson's glands are involved. A meatus below 20 or 21 F. should be enlarged.

4. The prostate and seminal vesicles. After micturition the bladder is partly filled, either with boric acid solution or with oxycyanide of mercury one to 5,000, preparatory to rectal exploration of these organs. But beforehand, the patient is instructed to pass part of the solution for the purpose of irrigating the entire urethra so as not to contaminate the prostatic fluid about to leak out. The prostate is first palpated as to size, shape, and consistence. It may be enlarged and tender, but a normal size does not exclude the presence of prostatitis. One side may be dense or nodular, while the other may be soft and boggy. Normally the seminal vesicles are not palpable, but when chronically inflamed they may be felt like tortuous cordlike bodies running along the lateral sides of the prostate. The prostate and vesicles having been massaged, a miscroscopic stained smear is now examined for pus and micro-organisms. Schlaginteit introduced the following macroscopic method of distinguishing between prostatic fluid, seminal fluid, and pus. Normal prostatic fluid disseminates and gives an opalescent appearance to the water, pus sinks to the bottom, and seminal vesicular fluid floats or hangs in the water.

5. Urethral localisation of focal lesions. Having exhausted the foregoing methods of examination, a further search for the cause becomes necessary, since the possibilities for persistence of symptoms are numerous. The aids at our disposal are, *a*, bougies and sounds, *b*, the urethroscope. The bougie-à-boule is of undoubted value as an aid to determine the existence of constricting bands in the urethra or the actual presence of strictures. When resorting to its use, we should select the largest size that the meatus will admit, and note is made as to the size which meets with obstruction as well as the size which passes through, and also the distance of the constriction from the external meatus. The shoulder of the acorn on the bougie-à-boule will show the presence of constriction as it is withdrawn from the urethra. Palpation of the urethra on a sound will frequently reveal periurethral local infiltration or local tender spots, but for these the urethroscope is of more value.

Urethroscopy.—By the proper interpretation of urethroscopic findings, we have at our command an aid of great service to pursue the further search of pathological lesions in the urethra. In the anterior urethra, exploration should be made for, *a*, soft infiltrations, *b*, hard infiltrations and constrictions, *c*, glandular changes, *d*, local denudations.

Soft infiltrations.—When the urethroscopic tube is inserted there may be a tendency to capillary bleeding. The mucous membrane appears considerably hyperæmic and in certain locations like the bulb the epithelial lining may be lacking and replaced by easily bleeding granulations. The pale-white striations observed in a normal urethra are not visible and the lumen, instead of being centrally situated, is displaced toward one side, showing bulging folds of infiltrated mucous membrane. While the openings of Littré's glands may not be visible, the lacunæ of Morgagni are dilated and choked with a visible drop of matter.

Hard infiltrations.—The tube is not easily admitted, the mucous membrane appears pale and presents into the lumen of the tube several thick folds of mucous membrane, but when the process goes on to stricture formation, these folds will no longer be visible. The glandular openings are barely visible.

The posterior urethra.—This part of the canal may show similar pathological changes with additional ones in the colliculus. This structure undergoes changes in many instances, as described under pathology. These changes may be found in cases of non-gonorrhœal origin, and may be due to such causes as masturbation or excessive venery, as is shown in a case detailed by me in a recent article (11).

THE COMPLEMENT FIXATION TEST.

Since the reaction is dependent upon the presence of gonorrhœal anti-bodies, a positive reaction cannot be expected until a sufficient time has elapsed for their development—three to four weeks. Cases that become strictly localised in the anterior urethra do not become positive at all (12).

It must be borne in mind that a negative reaction does not have the same value as a positive one. This test has shown that from ten to twenty per cent. of cases that were considered clinically cured, are still infected (12). Does a positive reaction mean that there still exists a focus of living gonococci somewhere in the body; or that gonorrhœal anti-bodies may persist for a long time after all gonococci are dead? Schwartz and McNeil think it is due to recent activities of living gonococci. A positive reaction has never been found in a non-gonorrhœal patient (13). Gonorrhœal vaccines, when injected, give positive results when the blood is tested.

GENERAL MANAGEMENT.

The general health of the patient should be looked after, since improvement along these lines will aid materially the local condition.

Local Treatment.—The fundamental principle in the treatment of chronic urethritis rests largely upon the nature of the lesion found. Pathology teaches us that this process is characterised by infiltrations that are followed by contractures of varying degree. The need of mechanical dilatation of the urethra therefore becomes apparent in order to bring about absorption of the infiltrate to restore the lumen as far as possible to its normal calibre. The question arises, when to begin the dilatation treatment. Neisser, Janet, and others of equal fame, hold the view that so long as there are gonococci or other micro-organisms demonstrable in the discharge, no instrumentation should be resorted to, and that their extermination should be accomplished by proper methods of irrigation before undertaking mechanical treatment. But as previously shown, the mere absence of gonococci from repeated smears is not proof positive that they are absent, hence Wossidlo thinks that in such cases one must trust to luck and start dilatations. He further states that he observed cases in which gonococci were scantily present in spite of persistent treatment by irrigations, but he caused their disappearance by starting the dilatation treatment, with general improvement finally resulting in cure. We had cases in which gonococci were not found at the end of the second dilatation, and the cases went on to recovery, but the third dilatation brought on a profuse purulent discharge containing numerous gonococci without reinfection from without.

Finger reports similar cases. The following rules may therefore be laid down as to when to begin dilatations:—

1. When repeated examinations show no gonococci.

2. When persistent irrigation treatment fails to remove the few lingering gonococci, especially when the urethroscope reveals the presence of focal lesions in the mucous membrane and when the clinical symptoms show no contraindications.

The extent of each dilatation will largely depend upon the condition of the mucosa as revealed by the urethroscope. If the mucosa is considerably congested, painful, and tender, the dilatation must be started at a low scale and ascend very gradually until the sensitiveness subsides. Should the ure-

thra, however, not be sensitive, we can, from the outset dilate up to No. 28 and in each successive dilatation, ascend the scale from one to two numbers. When hæmorrhage is brought on, it is best not to go higher at the next sitting than half a number, or else remain at the same point as at the previous dilatation—*i.e.*, if the last dilatation was brought up to No. 28 and hæmorrhage occurred, we therefore do not go higher than No. 28 at the next sitting. The frequency of each dilatation will largely depend upon the reaction set up in each case. Should hæmorrhage arise, we must wait for about ten or fourteen days before the next treatment; but in cases where the reaction is mild, the dilatation may be resorted to once in eight or ten days.

The period to be expended on the dilatation treatment will be governed largely by the amount of improvement that follows and by the urethroscopic appearance of the mucosa. The type of instrument to be selected will depend upon the part of the urethra involved. The ordinary sound may be used for the entire length of the canal, and we can gradually rise in size up to a point where further sound dilatation becomes extremely uncomfortable or inadmissible by the external meatus. We therefore resume further treatment by the use of the Oberlander-Kollmann dilators. Meatotomy should be performed when the small meatus proves to be a hindrance to the treatment.

Since dilatation causes mechanical emptying of the glandular sinuses of their infected contents, it becomes apparent how important it is to irrigate the urethra and remove these contents. With this object in view, Kollmann has constructed his dilator in such a manner that irrigation can be done simultaneously with dilatation. When this cannot be carried out, the urethra should be irrigated immediately after each dilatation, using an antiseptic solution such as silver nitrate one in 10,000 to one in 3,000 according to the sensitiveness of the patient, or a solution of oxycyanide of mercury one in 5,000. The irrigations must also be carried out independently of the dilatation treatment, and are best done every second day. Their purpose is to overcome the chronic catarrhal process of the mucous membrane superficially situated, and to stimulate healing of the denuded epithelium here and there. For this purpose our time-honoured drug, silver nitrate, heads the list of all those that are of benefit. It should at the outset be used in weak solutions, one in 10,000 to one in 6,000, and gradually raised in strength.

As the largest number of cases involve the whole canal, it is therefore wise to apply the irrigation to its entire length in the following manner: The patient is instructed to urinate and then, through a soft rubber catheter of moderate size, about 150 c.c. of the solution is injected, either with a Janet syringe or with the irrigator, and then he is told to urinate. When the case is still in the subacute state, we may first use the organic silver salts and then turn to silver nitrate.

When the lesion is confined to the anterior urethra irrigation can be carried out by inserting a soft rubber catheter into the urethra as far as the bulb, but when the posterior urethra is the main offender, good results will be obtained by the instillation method with the Keyes-Ultzmann instillator of 0.5 per cent. silver nitrate. In the extremely obstinate and stubborn cases where silver nitrate does not bring about the desired effect, copper sulphate three to five per cent. instillations will frequently give admirable results, but the patient should be warned of the sharp reaction and extreme discomfort that may last for several hours.

As stated above, the prostate is frequently involved, and unless this gland is attended to the urethritis will continue indefinitely. Hence a systematic course of massage must be added to our other treatment and should be performed once in about five days. As the prostate may harbour in its glandular sinuses various micro-organisms, it becomes apparent how important it is either partly to fill the bladder with some antiseptic fluid which is to be voided immediately after the massage, or to irrigate the entire urethra soon after massage.

As a general rule, a chronic urethritis case requires treatment at least every second day, each kind of therapy at the following interval: *a*, Massage once in about five days; *b*, dilatation once in about eight to ten days; *c*, irrigations every second or third day. This scheme must, of course, be modified according to the amount of reaction that sets in, or according to indications that may arise. In cases where the smear or prostatic secretion shows secondary infection, the use of oxycyanide of mercury, one in 5,000, is beneficial, but its use is not to be recommended when the patient takes internally the iodides as the two seem to combine to produce mercuric iodide.

Urethroscopic treatment.—Urethroscopy is an unusually valuable aid in the treatment of chronic urethritis, but its use must be combined with all other means at our disposal (14). While in acute cases its use is contraindicated, yet in chronic urethritis it will most frequently clear up persistent cases. For instance, a case that was regularly and persistently treated for many months, still retained the morning drop and shreds. The urethroscope revealed the presence of denudation of the epithelium in the bulbous urethra, which was covered with minute granulations. The area was touched up with silver nitrate, ten per cent., on a swab through the tube on three occasions with the result that the shreds and morning drop disappeared. Another persistent case showed the lacunæ of Morgagni choked with drops of pus. These were touched up in the same manner with a favourable outcome. I recall two cases that were operated on for seminal vesiculitis, the first, three years ago, and the second, five years ago. After the seminal vesiculotomy, the urine was never clear, but was always moderately cloudy and contained heavy *débris* and shreds in spite of long treatment at two different clinics. Posterior urethroscopy with the Wossidlo urethroscope revealed to me in both cases exactly similar findings. There was a distinct pocket-like sinus in the prostatic urethra leading into the prostatic substance. By pressure with the finger in the rectum considerable *débris* was expressed from the sinus, enough to becloud the field of vision. These fistulæ, in connection with other treatments, were cauterised once in eight days with silver nitrate, twenty per cent., through the urethroscope with ultimate recovery in both. Similar therapeutic measures are beneficial in cases where the colliculus is enlarged and contains many vegetations which continually throw off shreds, aside from the fact that such a lesion causes urgency of micturition as well as sexual irritation. Furthermore, polypi and other foreign growths in the urethra can be treated successfully only through the urethroscope.

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CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE MEDICAL PROFESSION AND THE ARMY MEDICAL SERVICE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I beg to enclose for publication in your next issue copy of correspondence with Sir Alfred Keogh, D.G.A.M.S., and having regard to the urgent and important matter with which it deals I hope you will be able to give it an important place in your JOURNAL.

I am, Yours truly,
MAURICE R. J. HAYES, Hon. Sec.,
Irish Medical War Committee.

Dublin.
March 11th, 1916.

Sir Alfred Keogh, D.G.A.M.S.,
War Office,
London.

March 9th, 1916.

DEAR SIR,—I am directed to enclose for your information editorial comments in reference to the Central Medical War Committee appearing in the current issue of THE MEDICAL PRESS. I am particularly to direct your attention to paragraphs five and six, on page 206, in which it is stated:—

> "That neither the one nor the other of these responsible and well-informed officials" (Sir Alfred Keogh and Mr. Tennant) "sees any present need for increasing the existing number of officers in the R.A.M.C."
>
> "On the one hand we know on unimpeachable authority, that the Director-General does not want any more medical officers, a fact which, on the face of the numbers enrolled, must be perfectly obvious to any thinking person."

As my Committee is about to send a circular to the Irish doctors somewhat similar to that which has been issued by the Central Medical War Committee to the practitioners in Great Britain, the Committee, before doing so, would like to have information as to the accuracy of the statements above referred to, since, if they be true, the Committee would not feel justified in asking the Irish doctors to make the very great sacrifices which the volunteering of their services would entail.

As you are perhaps aware, the work of my Committee has been fruitful in procuring a very large number of doctors for service with the troops, and at the present time applications are being received in plentiful numbers. The Committee is of the opinion that since THE MEDICAL PRESS enjoys a large circulation in Ireland, the statements now appearing in it will tend seriously to interfere with the further recruitment of Irish medical men, and before taking any further steps to procure more men it is anxious to be reliably informed as to what the existing needs may be.

I am, Yours faithfully,
(Signed) MAURICE R. J. HAYES, Hon. Sec.

War Office,
Whitehall, S.W.

March 10th, 1916.

MY DEAR SIR,—The sentence which you quote from THE MEDICAL PRESS AND CIRCULAR is evidently founded upon some information which has been conveyed to that publication by some persons who do not take the trouble to understand the position. I think it is a great pity that the Editor, who must be a member, I suppose, of our profession, has not done me the courtesy of asking how the matter stands. It is not my custom to withhold information from any member of the medical profession who desires to receive it. The statement is entirely false. It is very far from anything I have ever said. There is no present necessity for increasing the number of doctors with the Armies abroad; but it is not fair to those patriotic men who have given us their services for a year that they should not be relieved by others who have, up to the present, done nothing. I want to get the names of all the medical men upon my list, so as to be able to relieve those who are abroad. You know that the medical profession is the only body of citizens which is only asked to serve for one year with the Armies. All others serve for the duration of the war. It is obvious that after the first year, the monthly additions up-to-date will require, month by month, relief, and when I tell you that the number of medical men returning from France, either sick, wounded, or compelled by the exigencies of their practices not to renew their engagements, amounts to over 150, it is quite clear that I require 150 doctors a month to replace them. The statements which I make to this effect are plain and intelligible to the meanest comprehension, but they are garbled by certain persons to suit their own views and to mislead many members of the profession, as they have obviously misled the Editor of THE MEDICAL PRESS AND CIRCULAR. A public official cannot reply to remarks appearing in the press, but this custom does not prevent him replying to private communications received from other people. In my opinion, the Editor of the paper could have ascertained how the matter stood without depending upon information conveyed to him by third and interested persons.

You are liberty to make any use you like of this letter.

Yours very truly,
(Signed) ALFRED KEOGH.

Maurice R. J. Hayes, Esq., F.R.C.S.I.,
Hon. Sec., Irish Medical War Committee,
c/o The British Medical Association,
16, South Frederick Street, Dublin.

["Sinapis," who is responsible for the paragraph referred to in the above correspondence, deals with this matter in the "Periphery" page.—ED. M.P. and C.]

IS GONORRHŒA A BLOOD DISEASE?

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR.—With reference to Dr. McWalter's letter in your issue of March 15th, may I call his attention to Abel Soupplet's "La Blennorrhagie Maladie Générale" (Paris, 1893), and Marcel Sée's "Le Gonocoque" (Paris, 1896) (with bibliographies), wherein he will find much interesting matter?

As to chancroid, that may at times lead to an extensive serpiginous ulcerating condition of the skin lasting for years and very rebellious to treatment. I agree with Dr. McWalter that one should never make light of the chancroid sore. Chancroids should be treated just as carefully as any other

venereal infection. A sharp look-out should always be kept for the subsequent development of a primary syphilitic sore on chancroids. I have never had to regret a non-committal attitude from this point of view when in the presence of chancroids. It should also be borne in mind that chancroids may occur extra-genitally just as primary chancroids do.

I am, Sir, yours truly,

George Pernet, M.D.

London, W.
March 18th, 1916.

THE ROYAL COMMISSION ON VENEREAL DISEASES.

To the Editor of The Medical Press and Circular.

Sir,—The investigations of the Royal Commission on Venereal Diseases have thrown a strong light upon the disastrous effects of this scourge on the life of the nation. They have also shown that these diseases can be successfully combated and in time eliminated by the prompt application of the methods of modern medical science. But this achievement, which would put an end to an immense amount of misery and suffering, and would powerfully operate in increasing the efficiency of the population and in relieving its financial burdens, can be accomplished only by the action of the Government in providing the necessary facilities for treatment and by the spread of knowledge among the medical profession and the general public.

The National Council for Combating Venereal Diseases was formed in order to secure the fulfilment of these conditions, and it has already, by inaugurating lectures and in other ways, sought to draw attention to the grave danger which exists, and which will, as all experience proves, be greatly intensified when the war ends.

We desire to secure the co-operation of all bodies which are engaged in work directly or indirectly connected with these diseases, and especially to impress upon county councils and municipal authorities the necessity for helping in the dissemination of sound knowledge and plain warning.

The National Council proposes now to organise a comprehensive educational campaign to combat venereal diseases in all suitable ways, and especially along the lines laid down by the Royal Commission. This will involve the organisation of a number of conferences and courses of lectures, and the immediate issue of an authoritative summary of the principal conclusions of the report. These and other measures will need financial support, and we earnestly hope that all who realise the vital importance of combating diseases which are gravely impairing the national vigour and inflicting heavy loss of potential population, will be willing to assist our efforts.

Communications can be made to the honorary secretaries.

We are, Sir, yours truly,

Sydenham, President of the Council.
Thomas Barlow, Chairman, Executive Com.
Leonard Darwin, Treasurer.
Frederick Taylor, Pres., Roy. Col. Phys., Lond.
W. Watson Cheyne, Pres., Roy. Col. Surg., Lond.
F. Champneys, Chairman, Cent. Midwives Bd.
Louise Creighton.
Rickman J. Godlee.
J. Ernest Lane.
J. Scott Lidgett.
Malcolm Morris.
Frederick W. Mott.
Mary Scharlieb.
Hubert M. Southwark.

Kingsway House, Kingsway, W.C.,
March 14, 1916.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Surgery.

Meeting held Friday, January 28th, 1916.

The President, F. Conway Dwyer, M.D., P.R.C.S.I., in the Chair.

A CASE OF ECTOPIA VESICÆ TREATED BY TRANSPLANTATION OF THE URETERS.

Mr. H. Stokes read a paper on the above.

The patient, aged about 25 years, had been brought up as a male, but a systematic examination proved that she was a female. The case presented the usual bulging patch of inflamed mucous membrane situated between the widely separated pubic bones. The umbilicus was absent. The external genitals were cleft. The vagina was represented by a funnel-shaped passage with a small opening in the normal situation.

Operation.—The ureters were isolated for about three inches, a rosette of bladder mucous membrane being left attached. Through a tranverse incision the abdomen was opened and the uterus removed. The ureters were drawn in succession into the rectum, into which the rosettes projected freely. For three weeks the patient did well, and was able to keep herself quite dry. She subsequently developed signs of septic absorption, the end of the right ureter having sloughed, a fistula formed through the vagina. Ascending infection took place. Three months later an attempt was made to anastomose the right ureter into the colon through a flank incision. This proved to be impossible on account of the ureter being inflamed and attached to the vena cava. The right kidney, which was infected, was removed, but the patient died. A *post mortem* examination showed that death was due to ascending infection of the remaining kidney, which was due to an abscess which had formed outside the rectum around the transplanted right ureter. The autopsy further showed that the anatomy of the pelvic organs was normal, with the exceptions of the curious vagina and an internal displacement of the right ureter, which may have been caused by the first operation.

CONVENIENT RADIUM EMANATION TABLE FOR THERAPEUTIC PURPOSES.

Captain Walter C. Stevenson, R.A.M.C., read a paper, illustrated by lantern slides, on the above. He showed that the average quantity of emanation employed during a treatment could be directly read off the table instead of resorting to the troublesome expedient of a series of multiplications. The table shows the hourly decline in activity of 1,000 millicuries of emanation till in 12 days 19 hours it reaches 100 millicuries. Since the table contained over 300 numbers, the hourly loss of emanation corresponding to any one of these numbers could be similarly traced. If the amount of radium emanation available does not correspond to a figure on the table, it must correspond with the next lower figure within an hour. The decline of activity of 100 millicuries can be followed by starting again at the beginning of the table and inserting one place of decimals. For clinical work the convenience of the table for recording and estimating the dose was obvious. (This paper will be published in an early issue of The Medical Press and Circular.)

CHEILOTOMY FOR THE RELIEF OF CRIPPLING ARTHRITIS OF THE HIP AND OTHER JOINTS.

Mr. W. I. DE C. WHEELER read a paper on the above. He pointed out that reference to these cases under the reading of traumatic was incorrect. The so-called "rheumatoid" arthritis was probably metastatic arthritis like all other non-traumatic inflammations of joints. He recorded a case, and showed X-ray photographs of a young patient operated on in October, 1912, for crippling arthritis of the knee and hip. The patient had been a cripple for seven years, and locomotion was only possible with difficulty and with the aid of crutches. Extension of the left knee-joint was impeded by lipping of the outer margins of the tibia and femur, and no weight could be borne on the right limb owing to the presence of a ring of osteophytes at the junction of the head and neck of the femur. Abduction of the leg was impossible. The operation of cheilotomy was performed on the left knee, and was followed a week later by removal of all the osteophytes from the right femur. There was a line of cleavage between the new and old bone. The relief was immediate, and the result perfect. When the wounds were healed the patient walked without crutches and without pain, and had full movement of both joints. X-ray photographs taken nearly three years afterwards showed no tendency to recurrence of the disease. This, Mr. Wheeler stated, was the first case of cheilotomy on record. He drew attention to similar cases in older people where there was no line of cleavage between the old and the new bone, and expressed the opinion that the operation of cheilotomy in such cases might be followed either by new formation of bone or complete ankylosis of the joint. In certain cases, where pain without the formation of osteophytes was the main feature, relief could be obtained, especially in young people, by removal of the colon. He mentioned a recent case which he had treated by colectomy. It was remarkable that chronic arthritis of the "rheumatoid" variety was associated with auto-intoxication from a static colon, and in such cases the operation of partial colectomy was followed by admirable results.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

MEETING HELD MARCH 3RD, 1916.

The President, DR. LEONARD DOBSON, in the Chair.

MR. J. G. PARDOE read a paper on

PROSTATITIS: ACUTE AND CHRONIC.

Having first described the anatomy of the parts concerned, Mr. Pardoe discussed the causes, symptoms and treatment of acute prostatitis. Heroic treatment, unless an abscess formed, was deprecated, the treatment recommended being hot irrigation of the rectum through two tubes. If abscess formed, and required opening, it should be opened through the perinæum, and never through the rectum, otherwise a troublesome fistula would probably result. Passing on to the subject of chronic prostatitis, Mr. Pardoe said that the key to successful treatment was prostatic massage and posterior irrigation, systematically employed. The treatment was described, and the investigations to be undertaken before a patient suffering from gonococcal infection of the prostate could be pronounced free from disease and allowed to marry. Tubercle and syphilis of the prostate were discussed. The differential diagnosis between adenoma carcinoma and fibrous prostate brought a most interesting and practical paper to a close. It was discussed by the PRESIDENT and Mr. ASLETT BALDWIN.

Dr. S. D. CHIPPINGDALE showed a spleen, weighing less than two ounces, from a man æt. 73, who died from heart disease and bronchitis. The specimen was sent to the pathological laboratory for examination.

NEW LONDON DERMATOLOGICAL SOCIETY.

MEETING HELD THURSDAY, MARCH 9TH.

DR. ALFRED EDDOWES in the Chair.

CASES:—

DR. VINRACE: *Psoriasis.*—The patient, a man about 40 years of age, noticed a lesion on one foot about nine months ago, and for five months he has had what looks like psoriasis. He has not had any itching, smarting or burning. Attention was called to the raised edges of the lesions.

DR. G. W. SEQUEIRA regarded it as a case of lichen planus in the form which often resembled psoriasis. But the border of the patches in this case was characteristic of lichen planus papules. It was interesting to hear that this patient did not suffer irritation.

DR. T. P. BEDDOES and the PRESIDENT expressed agreement with Dr. Sequeira.

Dr. VINRACE replied that patches in psoriasis could be so like those of lichen planus that they seemed practically indistinguishable. He could not understand a statement being made in books that lichen planus was never generalised; he had seen several generalised cases.

(1) *Lupus erythematosus* of three years' duration, affecting chiefly the nose. In 1914 the upper half of the nose was treated with CO_2 snow in Scotland by two experienced dermatologists. A London dermatologist advised her to go to bed for three months, holding out great promise of good result. She regrets having taken that advice, as neither nose nor general health was in any way improved thereby. When first seen by Dr. Eddowes there was a scar occupying the upper half of the nose—thin and very white. The unusual whiteness was rendered the more conspicuous by reason of the redness, swelling and crusting of the spreading disease around it. Now, as is seen, the disease has practically disappeared. No fresh spots have formed and the white scar is assuming a flesh colour under the present treatment. Briefly stated, the treatment has been—internally, chloride of quinine; extraction of several teeth which were loose with pyorrhœa and thorough attention to the mouth. Locally: scarification, puncture, cautery, and soothing, antiseptic lotions.

Dr. VINRACE remarked that Dr. Eddowes' treatment was efficacious. There could be risk in the snow, but not in scarification. When the snow was applied to persons with a poor circulation, a frost-bite sometimes ensued.

Dr. G. W. SEQUEIRA thought the application of CO_2 was capable of doing much harm in acute cases; it was only in the chronic scaly cases that its effect was found to be good.

Dr. EDDOWES replied that it was a risky form of treatment to apply CO_2 snow over the bridge of the nose, as the skin there was thin, and easily affected by cold. The skin being tight and thin, there was very little circulation between it and the bone. When he cut into the scar he was anxious to prevent a quick healing; he stretched it with his fingers so as to ensure the formation of new granulation tissue. Already there was a very great

improvement through the formation of new capillaries.

Dr. Vinrace: *Lichen hypertrophicus* in a woman æt. about 60. She presented herself at the polyclinic seven years ago, and Sir Jonathan Hutchinson diagnosed the condition as lichen hypertrophicus. The case was now brought to show the tendency for recurrence to ensue in the same patch of skin. After about 14 months' treatment it disappeared for about seven years. She has some enlarged veins in the leg.

Dr. G. W. Sequeira agreed that this was a case of that form of lichen planus termed lichen hypertrophicus. The patch on the leg appeared to be quite typical. One of the features of lichen planus was its tendency to recur.

Dr. Mack agreed with the previous speakers. He had not seen a case of the kind in private since he had been in practice.

Dr. Beddoes said these hypertrophic cases were nearly always due to congestion, and were seldom seen unassociated with varicose veins.

The President advised support by bandage. Varicose veins, if bandaged night and day, were capable of recovering the function of their valves, and would thus get well frequently without operation.

Dr. Vinrace replied that he wished to emphasise the fact that in recurrence the same patch of skin took on the same appearance as before, and in the same proportions. He would have her leg bandaged and suitable remedies applied.

Dr. Eddowes: (2) A case of *lichen spinulosus* which had been shown to the Society four months ago was now brought on account of the appearance of fresh lesions—typical lichen *planus*. The patient now shows side by side L. spinulosus around and lying in a confluent lichenised patch with lichen planus a few inches away. Such a case is convincing proof of Dr. Eddowes' contention, which he has maintained for many years, that they are only different manifestations of one and the same disease. The modifications are chiefly due to the anatomy of the skin in the region affected, and partly to the effect of friction by clothing, etc.

Dr. G. W. Sequeira considered the case one of typical lichen spinulosus with lichen planus. It was well known that the two conditions were often associated. He recently had a case almost exactly similar, affecting the back of the neck; there was a patch of lichen spinulosus surrounded by papules of typical lichen planus.

Dr. Eddowes replied that in many books lichen spinulosus was separated from lichen, and spoken of as a keratosis. It was not really a separate disease. It was practically important to recognise this fact in treatment, as lichen would not tolerate strong remedies.

Dr. Mack said he could confirm the President's remark, because in one case of lichen planus under his care he treated it with Unna's plaster, of carbolic acid and mercury. The patient had a painstaking wife, and she cut out pits of plaster and placed them on every papule. By mistake, the dispenser once sent salicylic plaster. There was acute reaction, but happily the whole of the lichen planus disappeared after one application.

The Princess Royal will open, on March 17th, the Active Service Exhibition at Prince's Skating Club and Knightsbridge Hall in aid of the British Red Cross Society.

Sir Francis Henry Lovell, F.R.C.S., LL.D., Dean of the London School of Tropical Medicine, and formerly Chief Medical Officer at Mauritius, and Surgeon-General of Trinidad, left £2,140.

SPECIAL REPORTS.

ARMY MEDICAL ADMINISTRATION.

In the course of a debate in the House of Commons on March 15th, Mr. R. McNeill called attention to the administration of the Army Medical Service, and complained that immediately on the outbreak of the present war, the Government scrapped and threw aside the whole organisation which had been most carefully devised after the South African War. The advisory Board, which formed an important part of that organisation, and which was endowed with very considerable powers, was brushed aside and had never met since the war began. Terribly evil results followed. The functions of the Board were usurped by one man, the Director-General, Sir Arthur Sloggett. Indicating the radical unsoundness of the present organisation, the hon. member pointed to the basing of the Army Medical Service on the division as its unit as inconvenient and cumbrous. In mobile warfare the combatant unit might be proper, but in the present warfare the unit should be nothing smaller than the army corps. Dealing with details, the hon. member alleged wrong selection of sites for hospitals at Ypres, and the unnecessary retention of doctors on duty for thirty, forty, and fifty consecutive hours. At Loos thousands of wounded men were left lying in the open for many hours because the hospitals were full and the staffs overworked, although there were hundreds of doctors in another division within a few miles doing nothing. He did not blame the doctors, but the organisation which was utterly unsuited to the conditions. With our present system, rapidity in submitting wounded patients to operations, if operations were necessary, could not be secured, and a very large proportion of the injured soldiers who arrived in this country had wounds in a septic state. There ought to be movable hospitals all along our fighting front. Another point: the medical talent in the country was not used for the benefit of the Army as fully as it might be. A very large body of highly-instructed medical men held the views which he had tried to put before the House.

Major Astor said he was associated with a pretty large hospital, and had seen the landing of wounded men from the front, and he did not think that matters were quite as black as Mr. McNeill would have the House believe. He complained that unfit men, who were passed for the Army by overworked medical men, were kept in the Service after their presence had been disclosed. Hundreds of thousands of these unfit men were kept nominally for home defence, who were, in fact, wholly incapable of undertaking military service of any kind. This led to an unnecessary demand on the public funds

Captain Amery agreed with Mr. Astor with regard to the enlistment of the unfit. He had been told that during the past year the number of such men, who were a sheer waste, was something like 200,000. The Prime Minister said the annual cost of the soldier was £250. If that was so we had wasted in that way alone fifty millions of public money. This was no new mess with which the Government was confronted. It was a mess which had been a whole year coming about. It was the result of trying to maintain a sham system of voluntary recruiting.

Mr. Long (President of the Local Government Board) said a question had been asked about the wounded in Mesopotamia. Nobody more than the Government deplored that there should have been any avoidable suffering, and nothing would be left undone to provide a remedy. Some weeks ago the Secretary for India (Mr. Chamberlain), who was laid up by indisposition, decided in conjunction with the Viceroy and the Commander-in-Chief in India, to send Sir William Vincent and General Bingley to Mesopotamia to conduct an inquiry into the medical arrangements there and take all possible steps to remedy deficiencies. Moreover, the War Office had supplied the Indian Government, who were responsible for the medical care of the Mesopotamian Force, with two Indian general hospitals and their complete personnel, with the personnel of two other similar hospitals, with one British stationary hospital containing 400 beds,

one British general hospital with 1,000 beds, 100 doctors, and 100 orderlies. In addition the War Office had offered to meet any further demands. The doctors were supplied about a month ago. With regard to the discharge of the unfit from the Army, there was no doubt that men unfit for foreign service had been enlisted and accumulated at home, and the Committee over which he presided had the subject under consideration. By getting rid of the unfit and putting accepted men into the right places, a deal could be done for useful recruiting.

Colonel Arthur Lee said a very strong and unfair attack had been made upon the medical arrangements of our armies in the field by Mr. R. McNeill. He felt bound to repudiate some of the grosser charges levelled against the reputation and record of the Royal Army Medical Corps. It deserved praise and credit from the people of this country. As Lord Kitchener's personal representative, he had reported upon the work of the corps in the field. For nine months he carried on his investigation, and he utterly failed to recognise in the harrowing tale Mr. McNeill gave, the faintest degree of correspondence with the facts as he saw them. Mr. McNeill was large-hearted and sympathetic, and he had been misled. So far from there being any complaint of the way in which the wounded were dealt with from the firing line to the base, there was nothing but gratitude and praise. In fact, the Royal Army Medical Service, like the Commissariat, stood out as a model of efficiency. He protested against the unjustifiable, violent, ill-informed, and baseless attack which had been made upon a body of as highly-skilled and gallant men as ever served the State. They deserved not censure or carping criticism, but the whole-hearted gratitude of the entire community.

OBITUARY.

SIR CHARLES BENT BALL, BT., F.R.C.S., LIEUTENANT-COLONEL, R.A.M.C., REGIUS PROFESSOR OF SURGERY IN THE UNIVERSITY OF DUBLIN, HONORARY SURGEON TO H.M. THE KING IN IRELAND.

THE death of Sir Charles Ball occurred at his residence, 24, Merrion Square, Dublin, on the 17th inst., after several weeks' illness. He was sixty-four years of age. Sir Charles Ball was a native of Dublin, being a younger brother of the late Sir Robert Ball, the astronomer. He was educated at Trinity College, Dublin, where, after a distinguished student course, he graduated B.A. in 1871, and M.B. in 1872. He studied for a time in Vienna. He became a Fellow of the Royal College of Surgeons in Ireland in 1879, and in 1900 he was elected an Honorary Fellow of the Royal College of Surgeons of England.

Except for a short time spent as a young man in general practice in Wales, his entire professional life was spent in his native city. His first public appointment was in the poor law service, and for several years he was dispensary doctor for one of the city districts. While still a young man he was appointed one of the surgeons to Sir Patrick Dun's Hospital, and this position he held to the time of his death. Some twenty years ago, he was appointed University Anatomist, a post of honour but without duties attached. A little later he became Regius Professor of Surgery. For the past ten years he was representative of the University of Dublin on the General Medical Council. In 1902 he was Lane Lecturer at San Francisco, and in the following year Erasmus Wilson Lecturer at the Royal College of Surgeons. He was knighted in 1903, and created a baronet in 1911. Soon after the war broke out, he was appointed consulting surgeon for the troops in Ireland with the rank of Lieutenant-Colonel in the Royal Army Medical Corps. For many years Sir Charles Ball took much interest in the Royal Zoological Society of Ireland, of which society he was president for a term. He was also for many years a member of Council of the Royal College of Surgeons in Ireland, though he was unsuccessful in his candidature for the Vice-Presidency. He was President of the Royal Academy of Medicine in Ireland from 1909 to 1912. He held many positions as consulting surgeon in Dublin, to the following institutions, among others, Dr. Steevens', the Orthopædic, the Dental, and Monkstown Hospitals.

Sir Charles Ball's chief surgical interest was in rectal surgery. His little book on "The Rectum and Anus, their Diseases and Treatment," of which the second edition appeared in 1894, had a great vogue in its day. In 1908 he published a work on "The Rectum: its Diseases and Developmental Defects," and he contributed articles to Sir F. Treves' "System of Surgery" and to many journals. He was not, however, a prolific writer, never writing without having something definite to communicate.

For many years Ball may be said to have occupied the leading surgical position in Ireland. None of his contemporaries in Ireland was so well known outside Ireland, and indeed few British surgeons had a wider fame. Of this his selection as Lane Lecturer is sufficient evidence. He was an ingenious and sound operator, and more than most surgeons he was able to take a wide view of a case. His interest in science was not confined to surgical matters. He was well read in all branches of natural science and was a keen field botanist.

He leaves a widow, two sons, and four daughters, to whom we offer sincere sympathy in their bereavement. His elder son, Mr. C. Arthur Ball, who succeeds to the title, is a member of our profession and surgeon to Sir Patrick Dun's Hospital.

DR. THEODORE THOMPSON, C.M.G., M.A., M.D., D.P.H.London.

DR. THEODORE THOMPSON, late assistant medical officer of the Local Government Board, died on Monday, at Oxford, at the age of 59. He was educated at Aberdeen and Edinburgh Universities, graduating M.A. at Aberdeen in 1877, and being admitted a licentiate of the Royal Colleges of Physicians and Surgeons, Edinburgh, in 1883. In 1884 he took the M.B. degree at London University. He was called to the Bar at the Middle Temple in 1894. About the year 1886 he was appointed medical officer of health for Aberdeen, and held that important position for about 18 months. On being appointed to a similar post in Sheffield he resigned the medical officership of Aberdeen. While in Sheffield he was called upon to deal with a serious outbreak of smallpox, and the experience he gained in that connection brought him prominently under the notice of the Local Government Board. Dr. Thompson was an inspector of the Board from 1891 till 1911, when he was appointed assistant medical officer. He prepared for the Board a number of reports which are highly prized by the profession, dealing with smallpox and other forms of zymotic disease, and in this branch of medical investigation he was a recognised authority and expert. In 1900 he was a member of the Committee of Inquiry into the Public Health of Dublin, in 1903 British delegate to the International Sanitary Conference of Paris and Plenipotentiary to sign the International Sanitary Convention, and in 1904 delegate to the West Indian Inter-Colonial Sanitary Conference, Barbadoes. He was nominated a C.M.G. in 1905 for services in connection with sanitary matters under the Foreign and Colonial Offices, and the following year visited Rome as a British delegate to the International Sanitary Conference there, and Plenipotentiary to sign the Convention, and was sent on a special mission of inquiry into the sanitary defence of the Persian Gulf.

DR. THOMAS UNDERHILL, M.D., J.P., WEST BROMWICH.

By the death on March 10th of Dr. Thomas Underhill, of West Bromwich, there passed away one of the oldest and best known men in the public life of the Black Country.

Dr. Underhill, who two years ago, was made an honorary freeman of West Bromwich, died at his residence at the advanced age of 92.

Alderman Underhill was born at Tipton on February 3rd, 1824, his father being Dr. Thomas Underhill, who practised as surgeon in that town. Educated

privately, and subsequently studying at the Birmingham School of Medicine and at Queen's College, he qualified M.R.C.S., L.S.A. in 1845, L.R.C.P.Edin. in 1859. In 1871 he became M.D. of St. Andrews, and when his father retired from professional work, he, with his brother, Dr. William Underhill, continued his practice in the Tipton and Great Bridge district.

Dr. Underhill was one of the pioneers in the movement for the erection of the Dudley Guest Hospital, and for sixteen years one of its honorary surgeons. In 1873 he removed to West Bromwich, and at once began to interest himself in the public work of the town. He became a member of the Board of Commissioners, and on the incorporation of the borough in 1882, was elected one of the first aldermen, while he became the second occupant of the mayoral chair. He served as a member of the Board of Management of the West Bromwich District Hospital, and was one of the oldest county magistrates in Staffordshire.

Dr. Underhill was a past president of the Birmingham and Midland branch of the British Medical Association, and for some years was a member of the Council of the Medical Institute in Birmingham.

When Alderman Underhill celebrated his golden wedding, the opportunity was taken of showing practical appreciation of his long public service by the presentation of a cheque for £1,000, contributed by his many friends throughout the district.

DR. G. G. PHILLIPS, M.R.C.S., L.S.A., TICKHILL.

Dr. George Griffith Phillips, of Tickhill, near Rotherham, died suddenly on Wednesday, at the age of 76. Qualifying M.R.C.S. and L.S.A. in 1860, he had been in practice in the district for fifty years, and was appointed Medical Officer to the Doncaster Union in 1867.

DR. WILLIAM M. RAE, M.B., Ch.B., GLASGOW.

The sudden death is announced of Dr. William M. Rae, who practised in the Crosshill and Govanhill districts of Glasgow. He was at work on March 10th, but was taken ill and died at a late hour in the evening. Dr. Rae was a Glasgow man, and a graduate of Glasgow University. He is survived by Mrs. Rae and two daughters.

Medical News in Brief.

Sir Alfred Keogh's Assistant.

The Secretary of the War Office makes the following announcement:—

Surgeon-General W. Babtie, V.C., has been appointed to assist Surgeon-General Sir A. Keogh, Director-General Army Medical Services, especially in the work of supervision of invaliding and all questions connected with the physical fitness of the troops at home.

The reports circulated in various newspapers to the effect that Surgeon-General Sir A. Keogh has resigned are quite untrue.

Surgeon-General W. Babtie, V.C., was educated at Glasgow University, where he graduated M.B. in 1880. In 1881 he joined the Army Medical Service. He served in Crete in 1897-8 as senior medical officer, and received the C.M.G. for his services. In 1899-1900 he served in South Africa on the Staff of the P.M.O. in Natal. He was mentioned in despatches and promoted to lieutenant-colonel. He received his V.C. for his gallantry at Colenso in attending to the wounded under fire, and also for going out and assisting to bring in Lieut. Roberts, who was lying mortally wounded. He became assistant Director-General, Army Medical Service, and then in 1906 was Administrative Medical Officer, Woolwich District. Later he held the appointment of Inspector of Medical Services.

Indian Medical College for Women.

The Lady Hardinge Medical College for Women, in which the late wife of the Viceroy took so great an interest, was opened on February 18th.

The Viceroy explained that every possible attention would be paid to considerations of religion and caste. The hostels have separate blocks for Christian, Hindu, Mahometan, Sikh, and Parsee students, with special dining-rooms and kitchens and everything else required to observe caste distinctions, while there is a general recreation room.

The College contains a central amphitheatre, a hall and library, with excellent laboratories and many lecture rooms. It has accommodation for 100 students, while the hospital has 150 beds and the training school will take 25 fully qualified nurses, with the same number of probationers. The dispensary and hospital for the treatment of out-patients has been built by subscribers in the Punjaub. Three bungalows are already built for the women professors. One special feature is the division of the hospital into units, each complete in itself, containing family wards for separate accommodation, two general wards, two small separate wards, and a central building in each unit for purposes of administration. Thus each professor will have her separate and complete clinique with her own clinical laboratory, demonstrations and consulting rooms.

Blood Stopping Extraordinary.

During the hearing of cases of assault, drunkenness, etc., at Castlebar Petty Sessions, last week, Sergeant Hawkins told of a new method of blood stopping which was adopted by one of the parties. One Joe Conroy got a good beating and was bleeding profusely, and a man named Madden was trying to stop the flow of the blood. He had a long cloth round Conroy's neck, and then pulled the two ends tight, and then put his boot against Conroy's chest and pulled. He remarked to the sergeant that there was a vein in the back of the man's neck, and that he would stop the bleeding from it. The Chairman (Mr. Larminie) said he wished there had been a medical man there to see that new method. Answering a remark of the Chairman's, District Inspector Hogan said he hadn't Madden up for that as his intentions were good.

Exemption Tribunals.

At Spring Gardens an appeal was made by Messrs. Hardy and Son, surgical boot-makers, of Wandsworth and Balham, for the exemption of Frederick H. Hardy, twenty-four, manager of one of the businesses. Mr. Hardy explained that the firm did work introduced by half the doctors in the district, as well as military work, there being only one similar firm in the south of London. His son made the patterns and lasts for the boots and outworkers were employed, some as far away as Northampton. He had tried other persons, but had given them up in despair.

The appeal was dismissed, and, on being informed that he could not make further appeal, Mr. Hardy exclaimed: "It is a very great injustice, gentlemen."

Liscard Central Hospital.

It was stated at the annual meeting of the Liscard Victoria Central Hospital that the year had closed with a deficit of £2,340, as compared with £1,348 the previous year.

According to the report, four more members of the medical staff, including two resident surgeons, had joined the colours, and it had been very difficult to fill their places. War service had also claimed the hon. secretary. A gratifying feature was the increase of payments by patients, which was the best tribute possible to the attention they received. The in-patients numbered 1,108, and the out-patients 3,072, and there had been 667 surgical operations.

Medical Officer Indispensable.

At a meeting of Hitchin Rural District Council, on March 8th, the chairman stated that with regard to the circular letter from the Local Government Board having reference to the release of medical men of military age, at the present time they must admit that Dr. Macfadyen, their medical officer, was indispensable to them. Dr. Macfadyen had also been appointed medical officer to the isolation hospital, and, as they were aware, the hospital was getting full.

In supporting the chairman, Mr. Ball said over-

crowding at Letchworth was something appalling, and consequently there was a great risk of disease. They knew there were two cases of enteric, and it was only by constant watchfulness on the part of the medical officer that some great outbreak would be prevented. Overcrowding, of course, would be mitigated when the 100 cottages in course of erection were completed, but even then it would not by any means be done away with altogether. He certainly thought it necessary that the services of the medical officer should be retained.

The Council acquiesced.

Medical Exemption from Military Service.

AT Bath Local Tribunal last week, Dr. Andrew Mackay Niven, aged 34, asked for present exemption owing to the fact that his partner, Dr. Heathcote, was on active service and he was doing two men's work to enable him to go. He was responsible for 2,000 panel patients and the same number of private patients. When his partner returned, he was willing to accept, if offered, a temporary commission in the R.A.M.C.

The Recruiting Officer was prepared to mark this as a certified occupation, and the certificate was issued so marked.

Shortage of Doctors.

SIR FRANK FORBES ADAM, presiding at the annual meeting of St. Mary's Hospitals, Manchester last week, spoke of the difficulties caused by the call of the Army for doctors. The shortage of doctors, he said, was becoming a serious matter for the hospitals, and had it not been for the patriotic devotion of the staff, who worked day and night, they would not have been able to carry on the work of the hospitals. Further calls on doctors should not be made unless absolutely necessary.

Grants from King Edward's Hospital Fund.

IT is announced that hospitals in the County of London or within nine miles of Charing Cross, desiring to participate in the grants made by King Edward's Hospital Fund for London for the year 1916, must make application before March 31st, to the hon. secretaries, 7, Walbrook, E.C.

Anthrax from Shaving Brush.

A GAS inspector has died in Sheffield from anthrax, contracted from the bristles of a shaving brush while shaving himself. At the inquest a doctor said he knew of several cases of anthrax among soldiers three months ago due to infected shaving brush bristles.

Great Northern Central Hospital.

AT the sixtieth annual meeting of the Great Northern Central Hospital, Holloway Road, on March 16th, Mr. J. L. Smithett, who presided, said that their chairman, the Marquess of Northampton, was at the front, and over 50 members of the staff were now serving with the forces. During the year 626 wounded soldiers had been treated at the hospital and there had only been five deaths, although many cases were of a serious character. In the out-patient department 1,200 soldiers had been treated, many belonging to the Islington Battalion. Meanwhile, civilian patients had not been neglected, and last year there were 2,942 in-patients, 445 more than the previous year, and 23,115 out-patients. The total income of the hospital from all sources was £24,748, and the expenditure £24,300. This was the Diamond Jubilee year of the hospital and in normal times they would have made a festival of it, but in the present circumstances it was impossible to do so. In view of the increased cost of provisions and drugs the hospital was in need of a larger income.

Maltese Hospitals' Record.

A MINUTE issued by the Governor of Malta, Field-Marshal Lord Methuen, to the Director of Medical Services, announcing a reduction in the hospitals, states that 60,300 patients have been treated in the Malta hospitals since last May. The number of beds had been increased from a few hundreds to 20,000, and within one month, accommodation could be provided for 25,000 patients. His Excellency says he thinks that in no English hospitals could the patients have received abler treatment and greater care, and he lays stress on the help rendered by the philanthropic associations, the Ladies' Committee of the Order of St. John, and the British Red Cross, the local concert parties, and the people of Malta, including the Marchese Scicluna and the Casino Maltese. The patients' orderly conduct is attributed to the admirably organised concerts and amusements in the hospitals and camps.

The Late Mr. Stanley Boyd's Will.

MR. STANLEY BOYD, F.R.C.S., Surgeon to Charing Cross Hospital, has left £32,646. He left his estate in trust for his mother and sister, and subject thereto he gives £2,100 to Epsom College, for one foundation scholar, and the ultimate residue to the University of London for a Professorship of Pathology in the Medical School of Charing Cross Hospital. Out of the property belonging to his late wife he gives a number of legacies to her relatives, and £1,000 each to the London School of Medicine for Women, New Hospital for Women, and the Pathological Dept. of the New Hospital for Women, and any residue to the New Hospital for Women.

Royal Hospital for Chest Diseases.

THE Lord Mayor (Colonel Sir Charles Wakefield) presided, on March 15th, at the annual meeting of the Royal Hospital for Diseases of the Chest, City Road. He stated that since July last, the entire hospital had been devoted to the treatment of wounded soldiers. The sum received from the War Office was 28s. a week per occupied bed, but the actual cost worked out at 41s., leaving a deficiency of 13s. to be made up by the charitable public.

City of London Chest Hospital.

SIR GEORGE TRUSCOTT presided, on March 13th, at the annual meeting of the City of London Hospital for Diseases of the Chest. The report stated that the number of beds in daily occupation last year was 156, while 6,850 out-patients were treated. The Chairman said that up to the present time the beds set apart for wounded soldiers had not been used, but many patients had been received after discharge from the Army.

London Cancer Hospital.

PRESIDING, on March 13th, at the annual general meeting of the governors of the Cancer Hospital, the Earl of Northbrook said that at the outbreak of the war they decided to offer the use of their exceptionally well-equipped electrical and X-ray departments and fifty beds to the War Office. That offer was gratefully accepted, and during the past year fifty-seven soldiers had been admitted to the wards, and 135 military patients had received treatment in the electrical and radio-therapeutic department. It was satisfactory to know that a large percentage of the cases treated were restored to health and to active service.

Alleged Bogus Doctor.

AT Lawford's Gate Petty Sessions, on March 9th, Arthur John Partridge, 41, was charged that on December 23rd, at Kingswood, he made a false certificate relating to the death of Samuel Shipley Gane, of 91, Speedwell Road, contrary to the Perjury Act, 1911. Mr. W. S. A. Brown appeared on behalf of the Public Prosecutor, and asked for a remand, as there were at least five or six other charges of a similar nature, and a large number of witnesses had to be called.

Defendant told the Bench that he "practically pleaded guilty."

The information on which the warrant was issued stated that the defendant was formerly assistant to Dr. C. J. Perrott, of Kingswood, and attended a number of persons, and on their deaths gave the usual certificates. He was not a duly qualified practitioner, and it was alleged that there was only one

person named Arthur John Partridge registered as a medical practitioner, and he was at present serving with his Majesty's forces, and was not the Arthur John Partridge engaged by Dr. Perrott who signed the certificate referred to.

As it was necessary to bring Dr. A. J. Partridge from the front and to call other witnesses, the Bench remanded the defendant.

Consumption not Growing.

The Lord Mayor of Leeds, presiding at the annual meeting of the Leeds Association for the Prevention and Cure of Tuberculosis, held on March 9th, stated that in combating consumption the Association was fighting a great enemy, and he was of the opinion that tuberculosis could be stamped out. This terrible disease was not growing in the country, and although victory was a long way off, it was certain to come if the Association carried on its good work. It was interesting to know that 200 patients were actually fighting, and that the war had done them no harm.

A Dutch Panacea.

At the Mansion House, on March 13th, the master and mate of a Dutch eel sloop pleaded guilty to a charge of selling medicine called "Dutch Drops" without a licence and without affixing a stamp.

Mr. Dart, representing the Customs, said it was claimed for "Dutch Drops" that they cured every ailment under the sun. The master sold them at 7d. a bottle, but the mate undersold him, and charged 2d. For the defence it was stated that the vessel was remaining in the Thames till after the war, and the men sold the medicine to get pocket money. Custom House officers and policemen were among their patients. They admitted bringing over some thousands of bottles.

The master was fined 20s. in respect of two sales, and the mate 40s. in respect of four. The fines were paid by the ship's brokers.

The Only Doctor Left.

On February 28th, the Swansea Health Committee was called upon to decide whether to release Dr. Evans, borough medical officer of health, for service at the front. Dr. Evans had expressed his anxiety to enlist, but the chairman was strongly opposed to it. Another member said the point was who was going to suffer most, the men at the front or the people of Swansea for want of proper medical attention. He much preferred they should suffer. The chairman replied that they had to consider the future generation and added that if Dr. Evans enrolled, they would be losing not only mothers but children as well. He was the only medical man left for a borough of 94,000. By three votes to two the committee decided against the doctor enlisting.

Wounded Soldiers in Hospitals.

On February 29th, Mr. Tennant, Under-Secretary for War, said that on February 12th, there were in military hospitals in London 2,437 wounded soldiers, in auxiliary hospitals 1,267, and in civil hospitals 578. In the military hospitals on the same date there were 5,346 vacant beds.

Army Mental Cases.

Barrow Guardians have passed a resolution urging the Government and the War Office to make provision for soldiers suffering from mental derangement, instead of sending them to ordinary lunatic asylums, to be maintained at the expense of the ratepayers and thereby pauperising soldiers.

Fire at Turkish Hospital.

A fire has occurred at the Hungarian Red Cross Hospital, Constantinople, where 352 severely wounded soldiers were being nursed. A panic occurred, but all were saved.

University of Durham.

The following Candidates have passed the Second Examination for the Degree of Bachelor of Medicine during March:—

Anatomy and Physiology.—Honours, Second Class: John M. Brydson, James R. Hughes, B.A.

Pass List: Sujan Raj Chatterji, Rev. Samuel Foskett, Ibrahim Girgis, Samuel E. Goulstine, John P. Higham, David Levinstein, Habib Toma, Hans W. Walther, George R. Woodhead.

Anatomy.—Iris M. Cheeseright, B.Sc.

Royal College of Surgeons of Edinburgh.

At the recent dental examinations just concluded, the following candidates passed the first dental examination:—Edward C. Smith, Erstine L. Kelly, Meindert de Villiers, Oscar U. G. Reinocke, John Sharpe, Nico H. Albertyn and Cayetano Bathencourt, and the following passed in the subject of Chemistry and Physics:—Egbert J. C. Steyn, Gordon S. Richardson, Alexander Phillips, Andrew J. Molyneaux, Alan W. Hart and Mary C. Adam.

At the same diet the following candidates passed the final examination and were granted the diploma, L.D.S., R.C.S.Edin.:—William A. Rankin, Aubrey C. F. Barrow, George W. Young, Hamish M. Cranna, James L. Farnon, John F. Campbell, Douglas M. Mackenzie, William A. Mein, David C. Lamond, Johannes J. de Witt and Henry C. M. Morgan.

MEDICAL WAR ITEMS.

FOREIGN DECORATIONS.

It is announced in the *London Gazette* that the King has granted authority for the wearing of the following decorations:—

Insignia of the Third Class of the Order of the White Eagle (conferred by the King of Serbia): Captain E. N. Bennett, T. F. Reserve, for services as Commissioner in Serbia of the British Red Cross and Order of St. John.

Third Class of the Order of the Nile (conferred by the Sultan of Egypt: Mr. J. B. Christopherson, M.D., Sudan Civil Service.

Fourth Class of the Order of the Nile: Capt. A. G. Cummings, R.A.M.C.; Mr. V. S. Hodson, M.V.O., M.B., member of the Sudan Civil Service.

COMMENDED IN DESPATCHES.

The undermentioned officers have been commended for service in action in despatches received from the Vice-Admiral Commanding the Eastern Mediterranean Squadron covering operations between the time of the landing on the Gallipoli Peninsula in April, 1915, and the evacuation in December, 1915—January, 1916:—

Deputy Surg.-Gen. Octavius William Andrews, M.B., R.N.; Fleet Surg. John Menary, M.D., R.N.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

DR. W. J. MIDELTON.—Your communication reached us as we were "at press."

A DIETETIC CLINIC.

A DIETETIC clinic has been started at Buxton for the treatment of ailments of the stomach, intestines, kidneys, heart, and nervous system; and of arthritis, neuritis, gout, rheumatism, obesity, constipation, and high blood-pressure. The dietaries of Combe will be adhered to for colitis; of Dengler for digestive troubles; and of Van Noorden for diabetes. The Buxton Baths and Pump Room are within 3 minutes' walk from the clinic. Tariff and full particulars can be had from the Secretary, Dietetic Clinic, Buxton.

DR. W. P. B.—Our correspondent's letter is a little dubious and lacking in an essential detail—namely, whether the bond was terminable after a stated number of years.

SLATES IN SCHOOLS.

IN reply to a question on the threatened scarcity of paper for schools, Mr. Herbert Lewis says that the Board of Education would regard the reintroduction of slates as open to grave objection on hygienic and on educational grounds.

L.R.C.S.EDIN., M.R.C.S.—Five per cent. of glycerine added to eau de Cologne lessens the rapidity of evaporation.

MINERS' GIFT OF AMBULANCE.

ASHINGTON miners are making a levy upon themselves to provide a motor-ambulance for troops. The colliery owners will supply the necessary £600 in the first instance, and the men will pay it in instalments.

ESCULAPIUS.—Exposure to light and heat causes chloroform to deteriorate; chemical changes ensue under these circumstances, by which free chlorine is liberated, with irritating effects upon the patient. This would probably explain the trouble caused in the case to which our correspondent alludes.

ROAD-SWEEPER AS PLEASURE CAR!

THE Shoreditch Borough Council have purchased a couple of road-sweepers. The Customs officials now seek to mulct the authorities in duty amounting to £220, the ground assigned being that a road-sweeper must be classed as a pleasure car under the Finance Act, 1915.

SMITHFIELD (Honiton).—It is stated that no fewer than 1,600 men from St. Bartholomew's Hospital and Medical School are serving in the Navy, Army, and Territorial Force.

WAR WORK FOR THE AGED.

AN old age pensioner earning 38s. 6d. at munition work for the year before was held by the Isle of Wight Commissioners as not entitled to a pension.

"AMBULANCE, PLEASE."

THE Post Office has agreed to accept without charge telephone calls for the municipal ambulances. Persons calling must say "Ambulance," and state where it is required.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, MARCH 22ND.

ROYAL SOCIETY OF MEDICINE (SECTION OF OPHTHALMOLOGY) (1 Wimpole Street, W.).—8.30 p.m.: Paper. Colonel Lister, A.M.S., and Lieutenant-Colonel Gordon Holmes, R.A.M.C.: Disturbances of Vision from Cerebral Lesions with Special Reference to the Cortical Representation of the Macula. Neurology.—Members of this Section are specially invited to attend the meeting of the Section of Ophthalmology (see above).

HUNTERIAN SOCIETY (1 Wimpole Street, W.).—9 p.m.: Annual Discussion:—The Relationship of the Medical Profession to the State and the Community (opened by Dr. F. J. Smith), Sir John Collie, Dr. T. D. Lister, Mr. L. Dodd, and others will take part in the discussion.

FRIDAY, MARCH 24TH.

ROYAL SOCIETY OF MEDICINE (SECTION FOR THE STUDY OF DISEASE IN CHILDREN) (1 Wimpole Street, W.).—4.30 p.m.: Cases: Dr. E. A. Cockayne: (1) Sclerodermia; (2) Paroxysmal Hæmoglobinuria. Dr. E. B. Gunson: Gangrene of Leg following Diphtheria. Dr. J. L. Bunch: A Papulo-necrotic Tuberculide. Dr. H. Thursfield: Rickets: Multiple Fractures; and other cases. Specimen: Dr. J. D. Rolleston: Brain of "Mongolian" Imbecile. Short Papers: Dr. R. Hutchinson: Report on a Case of Hemi-hypertrophy with Post-mortem Examination. Dr. H. C. Cameron: Osteogenesis Imperfecta (Illustrated by cases and skiagrams).

TUESDAY, MARCH 28TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF PSYCHIATRY) (1 Wimpole Street, W.).—8.30 p.m.: A paper will be read by Dr. Bernard Hart on "The Psychology of Rumour."

Vacancies.

Putney Hospital (Chester Bequest), Lower Common, Putney, S.W.—Resident Medical Officer. Salary £150 per annum, with rooms, board, and laundry. Applications to the Hon. Secretary, at 198, Upper Richmond Road, Putney, S.W.

Bristol General Hospital.—Casualty House Surgeon. Salary £175 per annum, with board, residence, etc. Applications to Thomas W. Gregg, Secretary.

Nottingham City Asylum.—Senior Assistant Medical Officer. Salary £300 per annum, with apartments, board, and laundry. Applications to the Medical Superintendent.

The Guest Hospital, Dudley.—Senior Resident Medical Officer. Salary £150 per annum, with residence, board, and washing. Applications to the Secretary.

The Royal Surrey County Hospital, Guildford.—House Surgeon. Salary £150 per annum, with board, residence, and laundry. Applications to the Secretary at the Hospital.

Cambridgeshire Asylum, Fulbourn, near Cambridge.—Junior Assistant Medical Officer. Salary £200 per annum, with board, lodging, washing, and attendance. Applications to the Medical Superintendent.

Bootle Borough Hospital.—Junior House Surgeon. Salary £170 per annum, with board, lodging, and laundry. Applications to the Secretary, 71 Oriel Road, Bootle, Lancs.

Hulme Dispensary, Dale Street, Stretford Road, Manchester.—House Surgeon. Salary £250 per annum, with apartments, attendance, coal, and gas. Applications to Honorary Medical Secretary.

Leeds Public Dispensary.—Lady Resident Medical Officer. Salary £130 per annum, with board, residence, and laundry. Applications to the Secretary of the Faculty, Public Dispensary, North Street, Leeds.

Appointments.

GILCHRIST, J., M.D., Ophthalmic Surgeon to the Victoria Eye Infirmary, Paisley.

LYSTER, R. A., M.D.Birm., D.P.H., Lecturer in Forensic Medicine at St. Bartholomew's Hospital

MERRICK, W. J., M.B., B.Ch.Dubl., Certifying Factory Surgeon for the Castleknock District, co. Dublin.

SIMPSON, H., M.B., District Medical Officer of the Tonbridge Union.

THACKRAY, ELIZABETH, M.B., B.S.Lond., Deputy Medical Officer to the St. Pancras Board of Guardians.

WATSON, S. J., M.B., B.S.R.U.I., Certifying Surgeon under the Factory and Workshop Acts for the Abercrave District of the county of Brecon.

Births.

ARMSTRONG.—On March 13th, at Greenbank, Latchford, Warrington, to Dr. and Mrs. E. Frankland Armstrong—a son.

DE ZILWA.—On February 2nd, at Villa Mireille, Ward Place, Cinnamon Gardens, Colombo, Ceylon, the wife of Lucian de Zilwa, M.D., B.Sc.Lond., of a daughter.

DUNCAN.—On March 16th, at 14 North View, Liverpool, the wife of Captain Thomas Duncan, R.A.M.C. (temporary commission), of a son.

FOWELL.—On March 13th, at Woodcroft, Kenley, Surrey, the wife (*née* Violet Hood) of Patrick Harvey Clive Fowell, M.D., of a son.

GUTTERIDGE.—On March 13th, at Northlands Road, Southampton, the wife of Temp. Captain B. G. Gutteridge, R.A.M.C.—a son.

HOLROYDE.—On March 12th, at Selby Lodge, Consett, the wife of Lieut. G. Holroyde, R.A.M.C. (Myln Garth, Windermere)—of a son.

MILNE.—On March 12th, at The Chestnuts, 9 High Road, Streatham, the wife of George Milne, M.D., D.P.H., of a daughter.

ORLEBAR.—On March 11th, the wife of Jeffery Alexander Amherst Orlebar, M.B., Pakyns Manor, Hurstpierpoint, near Brighton, Temp. Lieut. R.A.M.C., of a son.

PEARCE.—On March 17th, at Enfield House, Bury Old Road, Manchester, the wife of Dr. P. Leslie Pearce, of a daughter.

PRITCHARD.—On March 13th, at 1 North Road, Highgate, to Dr. and Mrs. Clifford Pritchard, a daughter.

STANISTREET.—On March 16th, at Weymouth, the wife of Fleet-Surgeon R. W. Stanistreet, R.N., H.M.S. "Endymion," of a daughter.

WARNER.—On March 16th, at Croydon, the wife of Thomas Warner, M.D., Temporary Lieutenant, R.A.M.C., of a son.

WILLAN.—On March 14th, at 23 Claremont Place, Newcastle-on-Tyne, the wife of R. J. Willan, M.V.O., F.R.C.S., Staff Surgeon, R.N.V.R., of a son.

YOUNG.—On March 15th, at Holly Bank, King's Heath, Birmingham, Helen, wife of Graham Pallister Young, M.B., B.S., M.R.C.S., L.R.C.P., of a daughter (Faith Biron),

Marriages.

BELL—AUSTIN.—On March 15th, at "Cardon," Mortonhall Road, Edinburgh, Francis Gordon Bell, M.D.Edin., F.R.C.S.Eng., Temporary Captain, R.A.M.C., only son of Mr. and Mrs. Bell, "Flaxmere," Marborough, New Zealand, to Marion Welsh Berry, elder daughter of Mr. and Mrs. Austin, Bank of Scotland House, Kilmarnock.

Deaths.

BALL.—On March 17th, at his residence, 24 Merrion Square, Dublin, Charles Bent Ball, Bart., M.Ch., F.R.C.S.

CHAVASSE.—On March 12th, of broncho-pneumonia, at No. 2 General Hospital, B.E.F., Captain Arthur Ryland Chavasse, M.B.Oxon., R.A.M.C., only son of Lady Chavasse and the late Sir Thomas Chavasse, of The Linthurst Hill, Barnt Green, Worcestershire, in his 29th year.

CAMPBELL.—On March 10th, at 18 Queen's Road, Southport, Colin George Campbell, M.R.C.S., etc., aged 63 years.

FERGUSON.—On March 10th, at a nursing home, Southsea, Colonel Richard Patrick Ferguson, late R.A.M.C., of 13, Spencer Road, Southsea, aged 76.

GAVIN.—On March 12th, in France, accidentally killed by a fall from his horse, Neil Murphy Gavin, F.R.C.S.Edin., Temporary Lieutenant, R.A.M.C., Medical Missionary of the Irish Presbyterian Church at Anand, India, youngest son of the late Hugh Gavin, Stirling, and husband of Muriel Gavin, Cooldara, Gerrards Cross, aged 42.

SHORTRIDGE.—On March 9th, at his residence, Brookhill, Honiton, Devon, T. W. Shortridge, M.D., aged 62.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, MARCH 29, 1916. No. 13.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

Committee of the Royal Colleges.

THE announcement in the *Times* of Friday last that the Royal Colleges have combined to appoint an Advisory Committee to assist in the work of enrolling medical men, will be received not only with satisfaction but with a real sense of relief. I suggested the appointment of such a Committee in the "Periphery" of March 8th, and I am glad to find that the suggestion has met with so prompt and satisfactory a response. I pointed out last week that as soon as the members of the profession have real confidence in the body which is to decide the many delicate and complicated questions which surround the question of enrolment in individual cases, the reluctance which has so far been manifest will disappear. The appointment of this Advisory Committee is excellent. It will act as a Court of Appeal in whose judgments everyone will have confidence.

For Confidence.

BUT excellent as the appointment of the Committee is, it must not for a moment be supposed that that is all that is necessary to put the matter of enrolment on a thoroughly satisfactory basis. It is good that there should be a reliable Court of Appeal, but that does not do away with the necessity for so reconstituting the Court of first instance as to make it thoroughly acceptable to the profession. At the risk of being accused of wearisome iteration, I repeat what I said last week on this subject—namely, that the Central Medical War Committee will not be acceptable to a very large section, and that by no means the least important section of the profession, so long as Dr. Cox and Mr. Bishop Harman remain as its secretaries, and so long as the Committee continues to meet at the offices of the British Medical Association in the Strand.

Laymen.

I SEE that Sir Philip Magnus, in the House of Commons on Thursday last, suggested that the old Advisory Board, whose function it was to co-operate with the Director-General, should be reconstituted, and that the reconstituted Board should consist of some lay representatives. Sir Philip Magnus was understood to intimate that the proposal of lay representatives had come from some members of the profession. Now, this is a matter upon which the ideas of the profession should be quite clear. It has been proposed that a layman accustomed to organising on a big scale should be appointed as assessor to the Director-General, to aid the latter in the onerous and difficult tasks which this war has imposed upon him. Such an appointment, if made, would automatically terminate when peace was declared. That is one thing. It might be a good thing or a bad thing; it is, at any rate, a totally different thing from having laymen on the permanent Advisory Board of the Army Medical Service. That the latter would be a thoroughly bad thing both for the profession and for the Service there cannot be the slightest doubt.

The Advisory Board.

THE old Advisory Board was created immediately after the Boer War to enable the military authorities to bring themselves and keep themselves up to date on the purely medical side of their organisation. The R.A.M.C. officer, as soon as he attains the rank of major, relinquishes his professional work to become an administrator, and the higher he advances in military rank the further does he recede from "doctoring." Thus it comes about that the colonels and generals in the R.A.M.C. are very far from being practising doctors—they are overseers, organisers and administrators, whose knowledge of matters purely professional is necessarily both rusty and antiquated. To overcome this obvious and inevitable difficulty it was expedient that these functionaries should be kept abreast of modern thought and practice from among those who were still, so to speak, in the thick of professional and scientific work. They were, therefore, given an Advisory Board, whose members were still professionally active.

Its Powers.

THE first Board thus appointed was endowed with very extensive powers. But, as the lessons of the Boer War came, gradually through its agency, to penetrate the reluctant receptivity of the War Office, the officials of the latter found that the pushfulness of the Board gave them too much to think, and the Board was soon deprived of

its erstwhile powers. Little by little these powers became whittled down, and at the outbreak of the present war the Board and its activities were frankly and incontinently "scrapped." Much may be forgiven to a department in times of stress, and I make no complaint that the War Office should have lightened its burden of inconvenient advisors in 1914, more especially as it seems to have shown itself eclectic in its methods by keeping the kernel while debarrassing itself of the husk. If anything now remains of the original Advisory Board it is a mere rump, both in power and personnel, which continues its existence at the pleasure of the permanent military authorities. Again, I make no complaint, so long as it is understood that all this is a temporary arrangement which will cease with the cessation of hostilities.

The Lay Wedge.

But we must look to the future. That the military authorities, whether combatant or medical, should have something in the nature of a free hand during the present crisis all reasonable people are agreed. It is necessary, however, to guard ourselves against the thin end of a wedge which might claim that what is conceded in war-time shall be made a precedent for the establishment of restrictive or revolutionary methods in the coming peace-time. The medical department of the Army must, at all hazards, remain medical. It is already too much under the heel of the military. The Director-General himself is between the upper and the nether millstone, as witness his powerlessness in the matter of battalion Territorial medical officers; and if the Advisory Board is permanently deprived of its powers, or if its purely medical complexion is to be altered by the introduction of lay members, then the influence of the professional upon the medical side of the military arm will either disappear altogether, or it will become so impotent as to be entirely useless. So long as Sir Alfred Keogh occupies his present position this difficulty will not arise; but there can be no guarantee that his successor will be as loyal a supporter of the profession as he is.

Mandarins.

And, granted that a purely medical advisory board is to be reconstructed after the war, there arises the all-important question of how it should be constituted. In working out his scheme for the Insurance Bill Mr. Lloyd George made the mistake of supposing that he would get the best advice from the plutocrats of the profession on a matter which concerned purely the rank and file, with the result that in several important details the Act was ludicrously defective. It is sincerely to be hoped that no such mistake will be made in the present case. Governments and departments are all too apt to suppose that all doctors are just doctors, that there is no line of demarcation between various kinds of doctors, and they imagine that, say, a President of the Royal College of Physicians of London, whose life has been lived between Harley Street and St. Bartholomew's Hospital, has a deep and intimate and sympathetic knowledge of the conditions of practice which obtain in a colliery district. They might as well act on the assumption that the Lord Chancellor was acquainted with the circumstances surrounding legal practice in the slums of Birmingham. And yet when they are legislating for the many, they call to their councils only the representatives of the few.

and Plutocrats.

This is a mistake which is in danger of being repeated, but it is one which ought not to be repeated. If laymen are introduced on the Advisory Board at Whitehall, the governance of medical military matters will pass from the hands of the profession altogether. That governance, or influence, or whatever it may be called, in so far as it exists at all, is at present vested in members of a branch of our calling who know little or nothing about the trials and difficulties of the general practitioner—which is bad enough. But with the layman installed, worse is in store; for the medical element will be entirely swamped by the self-satisfied civilian element, which will probably be legal, as all our Government is depressingly and even debasingly legal. The medical profession must arouse itself to a realisation of this danger; it must insist upon being adequately represented on bodies which carry the future of its members in their hands. It must organise itself and become articulate. It must, above all things, make it quite clear that a few opulent and titled denizens of the purlieus of Cavendish Square are not its accredited representatives when such questions as the medical side of State services are under consideration.

The B.M.A. again.

With the appointment of the Joint Committee of the two Royal Colleges of London and England the present pressing problem of recruiting the profession for military service passes into a new phase. The men who were justifiably backward in putting their domestic, financial and professional cards on the table for the inspection of Dr. Cox and Mr. Bishop Harman, of the British Medical Association, will feel that there is now an appeal from such tact, taste and insight as these two gentlemen may be capable of bringing to the discharge of their delicate duties. A semi-public enquiry into the conditions which surround every doctor of military age is at best an inquisitorial affair, and as such is highly distasteful to the vast majority. But distaste becomes accentuated into positive repugnance when the inquisition is to be conducted by self-elected persons with no particular reputation, either for judgment or discretion. In spite of the appointment of the Committee, the facts concerning each individual who enrols will still presumably, in the first instance, have to pass under the eyes of these two gentlemen, so that their continuance at their posts constitutes a barrier to complete enrolment. Why do they remain? Why are they allowed to remain? If the scheme is to succeed, they must go. And the scheme ought to succeed.

Enrolment.

The Director-General has told us that to replace normal wastage he requires about 150 doctors a month. The problem of providing this number, with due regard to the interests of the civil population, is a serious but by no means

an insurmountable one. For the selections to be made with something approaching to equity between the various districts, and with fairness between man and man, the selecting body must obviously be in possession of all the available facts. In the hands of the Heaven-born, injustices would occur even with full data. Imagination reels at the thought of what will happen in the hands of a Committee which has the misfortune to be British Medical born, where it has insufficient data to work upon. It is therefore clearly the part of a public-spirited man to "do his bit" in providing data which are as nearly as possible complete. Enrolment does not necessarily mean that the enroller will be called up; but it does mean that the Committee will be in a position to judge so much the more fairly and impartially on the case of every man whose case comes before it.

The Specialist.

The case of the specialist is a very knotty one. On the one hand there is the fact that not very many of these, even if they be surgeons, are required at the front; and most of the purely specialist jobs have a waiting list, which is already full to overflowing. On the other hand, it is clear that a specialist of over forty years of age, as, for example, a physician who has always been a pure physician, is of very little service to the military, whereas he is very important to the civil community. Such men, and specialists of other kinds, especially if they be on the staffs of hospitals, are not in the least likely to be displaced from their present employments, but they would nevertheless do well to send their names and circumstances in to the authorities. If they are not content to do this to the Central War Committee—a decision which would surprise no one while the present secretaries are in office—they can communicate with the newly appointed committee of the Royal Colleges or with the Director-General himself. The latter is the most accessible and least official of officials, and is always ready to give a sympathetic ear to personal difficulties.

Sinapis.

Mr. Henry Hines Lee, of Kensington, left £250 to the Surgical Aid Society.

Fifteen soldiers are now segregated at the Fulham Military Hospital as "carriers" of cerebro-spinal fever infection. Two soldiers segrated as "carriers" have developed the disease in acute form.

Hornsey Town Council has decided to point out to the Local Government Board that the Medical Officer of Health, Dr. Coates, could not be spared, and that his assistant left to join the Forces in the early days of the war.

A firm, on whose behalf it was stated that they were the only firm in the country to fit padded rooms in asylums, obtained from the Southwark Tribunal four months' extension for the only employee able to do that kind of work.

The salary of Dr. G. Cohen, of Harringay, the Coroner for the Central District of Middlesex, has been increased from £190 to £375 by the Middlesex County Council. It was stated that the yearly average of inquests held during the past five years was 143 as against 112 for the three preceding years. Nine extra parishes were recently added to Dr. Cohen's district.

"THE GOLD CURE": PERENNIAL IF NOT PANACEAL.

Whether it was its peculiarly attractive lustre, its (formerly) unrivalled specific gravity, its unique resistance to the rusting powers of the atmosphere, its strangely refractory virtue of self-preservation when exposed to the usually overwhelming action of the higher-grade acid chemical solvents—or the combined influences of "suggestion" presented by the unparalleled aggregate—that conferred upon metallic gold the preternatural reputation which it possessed in past ages as a panacea for the relief of the ills, physical as well as mental, of humanity—singly and combined—remains a query to which no final answer can now be given. But the relapsing fever of its therapeutic investigation ever and anon reappears, and well shows that the primal faith in the wondrous possibilities of this medicament has by no means died out in the twentieth century, or been obscured by the shadowy gloom of the most destructive war known to the annals of the human race. Between alcoholic dipsomania and suppurative adenopathy there has always yawned a widely open gulf, yet the magical therapeusis of the precious metal was held by the collective clinical record of the opening years of this epoch to have bridged over the same with conspicuous success.

Let us take a preliminary backward glance at the opinions—believed in, or at least avowed—by "the highly experienced and famous chemist, John Rudolph Glauber," whose cognominal immortality has been secured by its association with the familiar sodium salt. The energies of that mighty mind were by no means confined to a single salt, or group of such, or even limited by the walls of his laboratory, for we find on inquiry that when he prepared his solution of "Green Lyon, or wonderful Golden Salt," he took his contemporary public into his confidence in the following printed announcement:—

"This Golden Liquor being drank, strengtheneth and confirmeth the whole humor radicale, Stomak, Brain, and all the inward parts of the body beyond all other medicines which I have hitherto known. Also it expelleth Melancholy, and all anxieties of Mind, taketh away Palpitation of the Heart, openeth obstructions of the internal vessels; it healeth the knots of the inward parts, as Liver, Lungs, etc., and cureth all inward exulcerations; it cureth Gravel and Stone, whether in the Penis or Bladder; it keepeth the Body soluble; expelleth Wind with the pains of the Cholick; preserveth the Blood from corruption; cureth the Leprosie, Scabs, and Fears of all sorts; in process of time it taketh away the Gout; to the insulting Apoplexy and Epilepsy it affordeth present cure; it cleanseth the blood infected by the Scurvy, Plague, and other Contagious Diseases; it preserveth and freeth from all internal Ulcers; defendeth the Lungs, Liver and other parts; and removeth Exulcerations already arisen; and takes them away radically. It so tingeth all the parts of a Man with its Balsamic Virtues, that not being easily obnoxious to Diseases, they enjoy a sound and long life. Outwardly used, it healeth all fresh wounds, no less than old and open Ulcers, without any Ointments or Plasters;

for in curing Ulcers of this sort, there is nothing in Animals, Vegetables, or Minerals, which answereth to this in Virtue; as also inwardly it cureth Ruptures."

This vastly comprehensive statement of properties and powers would seem, at least at a first careless glance, to have left small room or opportunity for the discovery of new items of virtue in the domain of aural therapeusis by subsequent generations of clinical observers or laboratory experimentalists. Nevertheless, the "gold cure for dipsomania" which loomed rather largely over the medical horizon of the opening years of the present century almost seemed to indicate a still further expansion of the panaceal claims. (Possibly the fact that "it expelleth Melancholy, and all anxieties of Mind" may be utilised as an explanatory *rationale* of its successful antagonism to the dipsomania to which the unhappy so often have recourse for a corresponding purpose?)

Then we had, some dozen years (or thereabouts) ago, an announcement by a distinguished French physician, M. G. Bué, of the discovery that the general antiseptic properties of chloride of gold were fully equal to those of the most potent iodine compounds (then in prominent repute), and that its topical application betrayed a special predilection for attack on every juxtaposed habitat of that deadly enemy of the human race, the microbe of tuberculosis. In the treatment of local tuberculous lesions he used a solution containing one gramme each of chloride of gold and chloride of sodium in 50 grammes of distilled water. Aspiration of suppurating gland and evacuation of tuberculous osseous tissue were respectively followed by injection of 1 cc. of the gold solution, two or three times a week. The opening left by the needle was sealed with cotton dipped in collodion. From four to twelve injections caused, we were assured, local cure in every case, no untoward after-effects occurring in any.

In our present issue we have the clinical use of colloidal gold in rheumatic and allied conditions powerfully advocated by Dr. Grenet, of Paris, who furnishes a remarkable series of curative results in support of his thesis.

CURRENT TOPICS.

Conscientious "Objects."

A most amusing feature in the embroglio concerning recruiting is the sorry figure cut by so-called conscientious objectors in all parts of the country. Relatively these do not appear to have been very large in number. The absurdity of the pleas put forward at the Tribunals, in many cases, has properly brought about the discomfiture of the applicants and made them "objects" of ridicule. Cases have been recorded of individuals who would look on complacently while Huns assaulted their mothers or sisters! One man who evidently would not hurt a fly was engaged—at enhanced remuneration—making high-explosive shells, for others to fight with, of course. His conscience would not permit him to do the latter! At another Court an applicant was identified as a man who had sung "Your King and Country Need You" at recruiting meetings last summer. Now that the country needs this "patriotic" singer his conscience is urged as an excuse for not doing himself what he urges others to do for him! Another of the "objects" supplemented his conscience plea by producing a medical certificate stating that he suffered from "acute attacks of ergophobia." The facetious Sheriff—it was a Scotch Court—translated this as "work-funk!" That the best-laid schemes o' mice and men aft gang agley finds illustration in the case of a young man who appeared recently before a London Tribunal holding in his hand a large Bible. Said he, "I have received a call for the mission field, and am about to go to the Belgian Congo." He declared he wound not render any assistance to a wounded soldier. The Court decreed that he should be trained for another "field" by refusing the appeal. Another unctuous body told the same Tribunal, when pressing his conscience excuse, that his "citizenship was not of his country, but of heaven." He was "here in the body only." To this the military representative is reported to have replied, "We will take your body, and leave the other part alone!" Complaint has been made of scant courtesy afforded to the super-conscientious at the Tribunals, and a letter has been forwarded on the subject from the authorities. In ordinary circumstances discourtesy cannot be defended. Those who clamour for exemption from service cannot complain, however, when the Court and public opinion regards the defences set up—of which the foregoing are only samples—as mere puerile piffle.

Pulse in Scarlet Fever.

Our French correspondent informs us that Dr. Nobecourt, at the last meeting of the Society of Medicine, Paris, stated that in a series of scarlet fever cases he had observed that a certain time after recovery tachycardia was present. The latter comes on either without any appreciable cause or under the influence of some slight intercurrent infection or of an attack of rheumatism with or without cardiopathy. With the exception of the latter cause, there was no appreciable modification of the heart. The presence of tachycardia may be noted first thing in the morning, when the patient is still in bed, and in this case it is generally of the orthostatic type. There is neither functional or subjective trouble nor arrythmia.

Army doctors ought to be aware of these cases, for men who present tachycardia need one or two months' convalescent leave, and when they return they ought to be carefully examined before a definite decision is taken concerning them.

Blood Transfusion in the Treatment of Hæmorrhage in the New-Born.

The treatment of hæmorrhage by subcutaneous administration of serum is well established, as in a case of hæmorrhage in the new-born recorded by Dr. Mabel Crawford in our present issue. Untoward anaphylactic effects need not be feared, and the efficiency of the method is proved if only the dose be given in large quantity and in good time. There are, however, cases in which serum given subcutaneously will not suffice. Such are cases of internal hæmorrhage not recognised until the anæmia is extreme; also cases where the loss of blood, though obvious, is so rapid that its arrest by this method will not save the patient from death. In such cases the transfusion of a suitable quantity of whole blood has been found to give encouraging results. In dealing with adults, however, the danger of hæmolysis is so great, and has proved fatal in so large a proportion of cases, that blood transfusion should very rarely be undertaken without a preliminary

investigation of the reaction of the blood of the donor with that of the recipient. This investigation must be carried out in a laboratory; it will take some hours, and may have to be repeated a number of times before a suitable donor is found. In dealing with hæmorrhage of the new-born we are more favourably situated. We have available a donor whose blood has been in intimate relation, has all but mingled, with that of the infant for many months. That the mother's blood may safely be transfused into the new-born child has been repeatedly proved in clinical practice, and has recently been further established by the investigations of Cherry and Langrock, of New York. They tested exhaustively the reactions between the bloods of mother and infant in 34 cases, and in no one of these was there any sign of hæmolysis or agglutination. They therefore claim that in every case of hæmorrhage in the new-born it is permissible to transfuse the mother's blood without any preliminary laboratory tests, thus rendering the procedure feasible under all circumstances where the condition of the mother permits, and with a minimum loss of time. They find it convenient that the blood be withdrawn from a superficial vein of the mother's arm and carried into the external jugular vein of the infant. It is of great importance that the blood should be transferred indirectly in order that the quantity used may be known, and 60—75 c.c. are said to be generally sufficient. The syringe and cannula method would seem to be best, it being a matter of choice whether the vessels are lined with a layer of saline, sodium citrate, or paraffin.

Fees.

From the land of the Almighty Dollar comes a strong and insistent recommendation to the profession to stiffen their backs in the matter of remuneration. Each visit is to be charged for at the full fee. In order to obviate any complaint upon the part of the patient, systemation padding is to be employed, such, for example, as recording of blood pressure, enumeration of leucocytes, and it is laid down that at all visits subsequent to the first "instruments of precision should be employed." Any mechanical apparatus for special treatment should be employed if possible. All therapeutics which entail the return of the patient are to be preferred to those which cause him to remain away—contented or not is not stated. The above scheme does not partake of very much exaggeration. We deplore and condemn such professional conduct. To increase one's income at the cost of mental equanimity is bad enough, but affords no comparison to such a sublime mixture of empiricism and dishonesty.

Discipline of the Wounded Soldiers in Hospital.

Everyone who has anything to do with the management of civil hospitals which are housing wounded soldiers must have been brought face to face with the difficulty of maintaining discipline. While the men are in bed or seriously ill the difficulty is slight, though even then the injudicious visitor, with his or her accessory supplies, requires careful watching. When the men are convalescent, however, and able to be up and out, the trouble begins. For the most part the men themselves are hardly to blame. Many of them are young and some are thoughtless, but on the whole they are decent, well conducted, and self-respecting men. But they are no sooner outside the hospital gate than temptation is thrown in their way. The average Englishman's idea of kindness is centred round the rite of "standing a drink," and, anti-treating orders notwithstanding, drinks are somehow available. We do not suggest that more than a small number of wounded men drink enough to injure themselves, but it is impossible to maintain discipline in a ward with one or two half-drunk, or even a few elated men. That more serious events sometimes occur is shown by the report of the death a few days ago from acute alcoholic poisoning of a young soldier in hospital at Cambridge. The regulations necessary to prevent such occurrences as we have spoken of often appear harsh and unreasoning, and in the current number of the *Spectator* the writer who calls himself "A Student in Arms" makes bitter complaints of the inelasticity of hospital discipline. It is certainly foolish that when a soldier is debarred —perhaps rightly—from the visits of his own friends he should have to submit to the petting and impertinence of well-meaning and fussy society ladies. But, as the editor of the *Spectator* points out to his correspondent, there are sound reasons for most of the regulations of which he complains.

Gangrenous Rigidity.

Dr. Prah, at the last meeting of the Paris Academy of Medicine, called attention to a symptom, not mentioned in the text-books, which he observed in five cases of gangrene among his war patients in Belgium. This symptom consists in the appearance in the affected limb of a muscular rigidity, more or less extensive, which gives to the limb the appearance of rigor mortis. He calls this symptom "gangrenous rigidity." It may be localised in one muscle (contracture of biceps) or affect a whole segment of the limb. Very probably the contracture spreads progressively, but the author was not able actually to observe this, for death or surgical intervention speedily put an end to the phenomenon. The rigidity can be overcome by a few forced movements. It is always a very serious symptom, and may be considered as foretelling fatal massive gangrene.

The Cause of Rheumatoid Arthritis.

For a long time rheumatoid arthritis was one of the puzzles of medical etiology. We spoke of it in a grandiloquent way, designed to cover our ignorance, as "a constitutional disease." But, of late years, evidence has been accumulating that rheumatoid arthritis is a disease due to bacterial infection. The frequent association with pyorrhœa alveolaris and with other foci of septic absorption is more than one of coincidence. Again, the marked effect of treatment by autogenous vaccines derived from whatever septic focus is present, seems to prove the dependence of the arthritis on bacteria. In our present issue we print a paper by Dr. Vipond, of Montreal, who has carried the matter a little further. He has succeeded in separating from the lymph-glands in a number of cases an organism, a vaccine of which produced remarkably good results. This organism, a diplococcus, he also found in the urine, and from his description, it appears to be similar to, if not identical with, an organism described in this country as present in the urine of such patients, vaccine treatment with which has given good results.

Cerebro-Spinal Meningitis.

The report just issued by the Medical Research Committee, under the National Health Insurance Act, on "Cerebro-Spinal Fever during the Epidemic of 1915," brings together, in a clear and concise form, a great mass of very careful and well-planned work, done by many observers. The authors of the report are Prof. F. W. Andrewes, Prof. Bullock,

and Prof. Hewlett. The chief conclusions are important. That the "meningococcus" is indeed the specific germ of the disease, remains the sure foundation of the work. It is a true species, "as species go amongst bacteria." There are subspecies of it; but these ought none the less to be called meningococcus, not para- or pseudo-meningococcus. From this "specificity" of meningococcus it follows that bacteriological examination is the necessary method for a positive diagnosis of the case. The subject of the detection and treatment of "carriers" is carefully considered. It appears that even the most vigorous and varied treatment of the back of the throats of carriers may fail to rid them of the germs; the report is more hopeful of good results from "an open-air life and the provision of as much fresh air as possible." For the treatment of the declared disease, the specific antitoxin did not, in the adverse conditions of last winter, fulfil expectations: it did not achieve so much as it achieved in the Belfast epidemic of 1907, and in some American epidemics. It remains the only "rational" treatment; but cannot be put anywhere near diphtheria antitoxin in the records of the art of healing.

The R.A.M.C.

[*Mr. Tennant, Under-Secretary for War, said that a certain M.P.'s criticism of the R.A.M.C. was wholly unjustifiable, and ought not to have been made.*—DAILY PAPERS.]

Ay, man! Ha'e ye ta'en to the rollin' o' logs,
To sulk wi' the Simons and grunt wi' the Hogges?
Let me tell ye there's never a girnin' M.P.
Fit to blacken the boots o' the R.A.M.C.

Ye'd fill up your lugs wi' the latest o' lees
'Gainst the lads who are savin' your skin overseas;
"Non-combatants?" Ay, weel, that just as may be!
Come ower, man, an' wark wi' the R.A.M.C.

Tak' haud o' a stretcher an' try it yoursel'
On a road that's been plastered wi' bullet an' shell;
If ye managed to bide there we'd maybe agree,
An' your tongue would be kept aff the R.A.M.C.

"Conscientious objectors" they're givin' us next,
Wi' bees in their bonnets a' bizzin' a text;
To the deil wi' their like! Ye can tak it frae me,
We're seekin' nae skunks in the R.A.M.C.

We're sick o' the grousin' political trade,
We're sick o' the Westminster mouthin' brigade,
We're sick o' the slackers wi' hearts a' agley,
But we're proud to belong to the R.A.M.C.

BRASSARD.

—From the *Westminster Gazette*.

The Hygiene of the Bedroom.

A FRENCH correspondent who has had some experience of "sleeping out" in both countries criticises the sleeping accommodation among the working and lower middle classes of society in England. While in French homes of the humbler class spare cash is expended in making the bedroom comfortable, in corresponding English houses it is the little-used parlour that attracts all the surplus. The bedroom furniture is "skimpy," the bedsteads are gaunt iron structures with comfortless wire mattresses that yield in the centre, hammock fashion. The mattresses, which are made of wool when not, indeed, not of coarse vegetable fibre, rarely ever of horsehair, are generally lumpy and uncomfortable—and no wonder, for mattresses in England are only remade when there has been a mishap or a death in the family. This is not only inimical to comfort, it is also extremely unhygienic—witness the extraordinary amount of miasmic dust that mattresses collect in the course of a few months' active service. In France, says our correspondent, even in the humblest home, mattresses are carded every year without fail. This process of renovation is usually carried out by an itinerary *matelassier* in the yard or garden where he can be supervised to prevent his filching any of the horsehair or wool. His fee is five francs, and the operation takes a couple of hours in his deft hands. No such facilities are available in England, not even in London, where the charge for re-making a mattress would be from fifteen to twenty shillings. Moreover, the mattress has to be sent to a big firm where it is retained for a week or a fortnight and returned notably lighter than when it departed. It would indeed be remarkable, in view of the quasi-impossibility of effective control, if unscrupulous employees did not appropriate a few handfuls of valuable horsehair, as and when the opportunity presented itself. These drawbacks may account for the unpopularity of mattress cleansing in England and the consequent discomfort.

PERSONAL.

MR. R. R. LEEPER, F.R.C.S.I., has been appointed Consulting Visitor in Lunacy in Ireland, in the place of the late Sir Charles Ball.

MR. W. I. DE C. WHEELER, F.R.C.S.I., Dublin, has been appointed honorary surgeon to the forces in Ireland with the honorary rank of Major in the R.A.M.C.

DR. STAINTHORPE, the Medical Officer of Cleveland, has set a good example in these days of restricted imports of paper by issuing his annual report typewritten on the back of old documents.

MR. EDGAR A. BROWNE and Dr. G. C. Walker have received the cordial congratulations of their professional colleagues on attaining their jubilee as members of the Liverpool Medical Institution.

SURGEON-PROBATIONER J. D. ARTHUR, R.N.V.R., one of the survivors of the wreck of H.M.S. Tara, who were captured by the Senussi, is reported by the Admiralty as having been rescued from captivity.

COLONEL CHARLES STONEHAM, C.M.G., F.R.C.S., senior surgeon at Westminster Hospital, left £24,865. He directed that his body should be burned, and the ashes cast in the sea, or scattered as widely as possible over the land.

Dr. WILLIAM MORGAN, Swansea, was presented with an illuminated address testifying to his great popularity and usefulness, on his resigning the post of medical officer to the Great Western Railwaymen's Provident Society, which he has held for 21 years.

MR. GORDON O'NEILL, professor of obstetrics in the Peiyang Medical College, Tientsin, has been given permission by the King to accept and wear the decoration of the Seventh Class of the Order of the Excellent Crop, which has been conferred upon him by the President of the Republic of China in recognition of valuable services rendered.

THE LORD MAYOR has received from the Royal Waterloo Hospital for Children and Women, which reaches its centenary this year, an invitation to preside at a public meeting to be held in the City on April 27th to celebrate the occasion.

FRENCH CLINICAL LECTURE

ON

TREATMENT OF ACUTE ARTICULAR RHEUMATISM WITH INTRAVENOUS INJECTIONS OF COLLOIDAL GOLD.

By M. H. GRENET,

Medicin des Hopitaux, Paris.

[Specially Reported for this Journal.]

The first of the series of cases, of which the summarised record is here presented to the reader, is that of a patient (Obs. I.) who had been suffering from a malignant form of acute rheumatism. The approach of death appeared to be inevitable and rapidly nearing, despite the intensive treatment with salicylate of soda which had been adopted; when I administered an intravenous injection of colloidal gold. After the succeeding stage of rather violent reaction, the temperature subsided; on the following day it was normal, and never rose again. The patient thus entered at once on the stage of convalescence—retaining only the double mitral lesion which had developed under my own observation during the period in which he was undergoing the salicylate treatment. The very remarkable success thus obtained in a case which had almost been *in extremis* incited me to follow out a course of systematic trial of the same therapeutic process in the cases of other rheumatic patients.

The second of this series of cases which I have had under clinical observation was that of an infantryman who had been attacked by a form of rheumatism of medium severity. He was quite cured after a few days. The third case was that of a lieutenant, who had reached the sixth day of a serious attack of rheumatism, presenting hydarthrosis and continuous pain in both knees, accompanied with pronounced anæmia, pallor, and albuminuria in large amount. On the very evening of the injection he declared himself greatly relieved; on the following day he moved his limbs with facility, and the albuminuria had completely disappeared. After eleven days from his entry into hospital, he walked a distance of three kilometres without difficulty.

I have now accumulated a total record of 84 rheumatic patients who have been treated after this method of procedure. I have been also able to compare the results, individual and collective, obtained in the cases of 54 patients who were treated with salicylate of soda, and I believe that I am in a position to affirm the therapeutic superiority of that with colloidal gold: the latter remedy calms the pain, shortens the duration of an attack of the disease, and prevents the development of complications. And it is above all in the cases of rheumatism occurring among young subjects, and in the markedly acute forms, that it presents its maximum of therapeutic efficacy. We will subsequently recur to a description of its mode of application, and the *rationale* of its curative effects; but at the outset a summary of some of the more significant cases and a description of some thermometric curves should prove more convincingly eloquent than long general commentaries.

Obs. I.—*Rheumatism of Malignant Type.*—F. (Jules), æt. 29, artillery soldier. Had formerly suffered from three critical attacks of acute articular rheumatism: the first at the age of 14 years, the second at the age of 18, and the third when he was 22. He entered hospital on April 30th, 1915, on the fifth day of his illness. The temperature was 39.4° (102.9° F.). Pain and hydrarthrosis in both knees; pains in shoulders; slight albuminuria. On the following days a series of complications developed in succession: great pericardial friction; double pleuro-pneumonic congestion; mitral endocarditis with enormous cardiac dilatation, ameliorated by administration of digitalin; hypertrophy of liver; albuminuria in great quantity; transitory spinal phenomena (pains in the back and legs; Kernig's sign; cephalo-rachidian fluid normal). From April 31st till May 24th had received 8 grammes of salicylate of soda daily. On May 18th we administered an intravenous injection of 5 c.c. of electrargol: no reaction, no subsequent result.

May 25th.—Intravenous injection of 2 c.c. of colloidal gold. The injection was administered in the morning, and was followed by a rigor, extreme tachycardia, and sweats. On the evening of the same day the patient began to show indications of relief. On the following morning the temperature fell to 37° (98.6° F.). It never rose again. During the succeeding days there was extreme polyuria—amounting to 4 litres. The albumin had disappeared from the urine on May 30th. The patient left hospital on June 17th. He was then suffering from no symptoms whatever, but retained a double mitral lesion, well compensated.

Obs. II.—Br. (Jean), æt. 35, infantry soldier. Had entered on the eighth day of an attack of medium intensity (shoulders, left elbow, articulations of fingers of left hand, hydrarthrosis of left knee). Had not taken any salicylate. Persistence of some pains in the shoulders after the first injection; complete cure after an interval of 48 hours following the second puncture.

Obs. III.—S. (Henri), lieutenant, æt. 39, first crisis. Had entered on the sixth day of his illness. Pains in all the limbs; hydrarthrosis of both knees; œdema of right hand and wrist; intense pallor; copious albuminuria. Injection of 2 c.c. on May 29th. After 24 hours, complete disappearance of all pains and swelling, also of the albuminuria. The patient arose from bed on June 3rd, and took a walk of three kilometres, without any pain whatever, on June 8th.

Obs. IV.—S., æt. 20, infantry soldier. Had entered on the sixth day of his illness. The crisis was one of marked intensity (hydrarthrosis of both knees; œdema of right wrist; pains in shoulders; notable proportion of albuminuria). Injection administered on May 29th; subsidence of temperature and disappearance of albuminuria on the following day. Slight relapse (pain and œdema of right wrist) on June 7th. Complete and lasting cure after second puncture.

Obs. V.—D. (Alphonse), infantry soldier, æt. 24. Had entered on the third day of his illness. The crisis was one of medium intensity (hydrarthrosis of both knees.

Obs. VI.—R. (Louis), infantry soldier, æt. 44. Entered on sixth day of illness. Crisis of medium intensity.

Obs. VII.—D. (Claude), infantry soldier, æt. 21. Had entered on the fourth day of his illness. Crisis

of medium intensity; slight hydrarthrosis of both knees; œdema of ankles.

OBS. VIII.—C. (Ferd.), corporal, æt. 19½. Entered on fourth day of illness, crisis of medium intensity (knees, œdema of ankles).

We do not wish to add unnecessarily to the length of this article by multiplication of recorded observations and descriptions of thermometric curves bearing a general family resemblance. But there are five cases which deserve to be placed in a prominent position on account of the fact of having been each accompanied at the outset with the characteristic signs of endocarditis.

Two of those patients had entered hospital with muffling of the sounds of the heart, and a slight prolongation of the first sound; the third presented a slight systolic bruit at the apex, of organic source, which lasted for two days; in the fourth case, there was also a mitral systolic murmur, which presented a rasping character; in the fifth case, we detected the presence of a pericardial *frottement*, and a systolic murmur located over the apex. Every one of these patients was treated with colloidal gold, and after some days there actually remained no traceable sign whatever of cardiopathy. We will merely sketch the course of two of these cases :—

OBS. IX.—P. (Henri), æt. 20, infantry soldier. First crisis; entered hospital on eighth day of his illness. Had already been treated during four days with salicylate of soda (3 to 4 grammes). Moderate fever (38°=100.4° F.). Pains in knees and shoulders; vertebral rheumatism, with extreme rigidity of vertebral column. Suffering greatly; is completely helpless and incapable of the least voluntary movement. Softening of the cardiac sounds; slight prolongation of first sound. July 16th; injection of 1.5 cc. of colloidal gold; on following day considerable diminution of the pains. But we discovered at the apex a slight systolic blowing murmur. Although the fever had subsided and the pains had disappeared, we administered a second injection on July 18th, hoping thereby to cure the endocarditis which was then in course of evolution. On the 20th, the bruit had great diminished; on the 21st it had ceased to exist; a little of the muffling of the sounds of the heart persisted for some time, but it gradually disappeared. We kept the patient under observation for some time, and his chest was auscultated by several of our colleagues; but not the least further trace of cardiopathy was ever discovered subsequently.

OBS. X.—B., æt. 28. First attack. Entered hospital on the ninth day of his illness. Violent crisis (knees, elbows, shoulders). Muffling of cardiac sounds; pericardial *frottement* in the mesocardiac region; slight murmur at the apex. Injection of 2 cc. of colloidal gold on August 4th; persistence of elevation of temperature; slight subsidence of the cardiac symptoms. August 6th: the cardiac sounds still remained muffled; the *frottement* and murmur have disappeared. Second injection administered on August 6th; rapid fall of fever; complete disappearance of all signs of endopericarditis. The patient left his bed on August 8th. Slight relapse from 13th to 16th of August, which was rapidly extinguished by administration of another injection.

The above series of examples demonstrate the clinical fact that by the administration of intravenous injections of colloidal gold we, as a general rule, bring about a rapid fall of temperature, and shorten the duration of the rheumatic crisis—and more especially of the convalescence—while at the same time we avoid cardiac complications. In our cases we habitually got the patient to leave his bed at an early date—at the close of two or three days of apyrexia.

In some of our cases a copious intra-articular effusion persisted. Accordingly, it was necessary, after the fever had subsided, to puncture with all the precautions of asepsis. Then we found, as a general rule, that there was no further tendency to the collection of the fluid; and we proceeded to raise the patients from bed one or two days after the evacuation. The two following cases present in this connection demonstrative observations of special value.

OBS. XI.—L., (Alexis), æt. 40. First crisis. Entered hospital on June 26th, on the sixth day of his illness. Acute rheumatism, with hydrarthrosis of both knee-joints. The fever subsided in eight days, after four injections of colloidal gold. The patient retained the bilateral hydrarthrosis, although now quite apyretic. Puncture of both knee-joints (35 to 40 grammes of citron-coloured liquid in each) on July 6th. Left bed on July 7th. No recurrence of the articular effusion; no muscular atrophy.

OBS. XII.—R. (René), æt. 30. Second attack. Entered hospital on July 19th, on the twelfth day of his illness. Temperature 39° (102.2° F.); muffling of the cardiac sounds; hydrarthrosis of both knee-joints. Two injections of gold (July 19th and 20th). Disappearance of cardiac signs (apyrexia) on July 22. July 20th we had punctured both knees (125 cc. from right joint; 110 cc. from left). No reproduction of the articular effusion; no muscular atrophy.

In the subacute varieties of rheumatism, in chronic cases of old standing, and in aged patients —also in those cases who have reached the tenth or fifteenth day of the disease, and after insufficient treatment, our methods are still effective; and prove superior to salicylate treatment in all the more unfavourable varieties of cases. The cure is, however, less rapid, and it is often necessary to administer five or six injections; a little of the stiffness and swelling of the joints may also persist for a considerable period. Nevertheless, we have seen many patients who had still continued, after a prolonged course of salicylate treatment, to present a high temperature, and pains which were aggravated by the slightest movement; yet in whose cases a rapid cure was effected by the administration of one or two injections of gold.

As in the case of all medicaments of pronounced activity, colloidal gold may provoke serious accidents, and we have ourselves had to deplore the occurrence of *one fatality*.

OBS. XIII.—P. (Benoit), aged 30. First attack. Entered hospital July 24th, on the fifth day of his illness. Polyarticular rheumatism (knees, tarsal regions, wrists). Great suffering. Rapid heart's action. No albumin in urine. Axillary temperature 39.5° (103.1° F.). Injection of 2¾ cc. of colloidal gold on July 25th at six o'clock. Violent reaction; extreme agitation; screaming; delirium. At the end of two hours the patient falls into a state of collapse; wretched pulse, cold extremities, and coma. Death took place at 11 o'clock at night, five hours after the injection.

At the autopsy we discovered a great variety of pathological conditions.

1. *Recent lesions*, associated with the acute terminal stage; meningeal and cerebral congestion; vascularisation of the meninges; punctiform hæmorrhages in both grey and white substances of the brain; punctiform hæmorrhages in both leaflets of the pericardium; slight serous pericardial effusion; renal congestion.

2. *Lesions of older standing:* heart soft, flabby, and fatty; inflammatory thickening of mitral and tricuspid valves. These alterations are undoubtedly referable to rheumatic infection. But over and above them we also discovered *renal lesions of old standing*. Both kidneys were small, lobulated and sclerotic, sclerous bands penetrating from the capsule in the direction of the parenchyma. The cortical substance was atrophied, especially in the left organ. The pyramids were destroyed and replaced by sclerous tissue in the left kidney, down to the level of the inferior pole.

Thus the patient presented old renal lesions of a nature which had made him exceptionally susceptible to the influence of any form of intoxication. Besides, when we commenced to treat him he had already been suffering from high fever; we also administered a large dose of the medicament—more than the 2 cc.—as it had occurred to us that by increasing the dose we should secure a more rapid and complete effect. We have now arrived at the conclusion that, in case of the first injection at least, the quantity should not exceed 1 or 1.5 cc. We feel quite convinced that by acting with prudence and after carefully testing the individual susceptibility of the patient, we will be enabled to avoid the recurrence of a similar accident. But the occurrence of a single unfortunate result, however deplorable, should surely not induce us to abandon the use of a therapeutic agent which has proved itself superior to all others previously known, and which appears capable of successfully warding off all cardiac complications. (*a*)

By the record of those few observations we have indicated the principal effects of intravenous injections of colloidal gold on the course of articular rheumatism. It now remains for us to describe in their entirety the *technique* and mode of action of our special treatment.

(*To be concluded in our next.*)

ORIGINAL PAPERS.

TWO CASES OF INTESTINAL HÆMORRHAGE IN THE NEWBORN.*

By MABEL M. CRAWFORD, M.D.,
Late Acting Assistant Master, Rotunda Hospital, Dublin.

In the Rotunda Hospital, during six months of last year, there were two cases of intestinal hæmorrhage occurring in infants during the first week. I think it worth while to report these cases, not only because the condition is not very common, but because one of the infants died and I was able to examine the abdomen *post mortem*.

In the first case the child was a small girl—weight at birth 5lb. 2oz., length 18½in., apparently healthy. There had been no complications during labour, which had lasted altogether 18 hours. The mother was a primipara of 28 years; she was not in good health, showing œdema of the legs, vulva and face, and passing a quantity of albumin in the urine. For this reason she was given no food, but was kept on water only from the time of her admission until after the child fell sick.

The first hæmorrhage occurred with a motion on the second night—*i.e.*, about 36 hours after birth—and two more occurred before morning. Nursing was stopped, and the child was given water alone by the teaspoon. The next morning the child vomited once—brownish material, small in quantity.

It being decided to use horse serum, and in subcutaneous doses of 2 cc. each, one dose was given that morning and two more at intervals of twelve hours. During the day the child had adrenalin, two-hourly and in one minim doses, and frequent sips of cold water. The hæmorrhage recurred repeatedly during the day, and by the evening the infant was very weak. From this time she was given milk with brandy.

On the fourth day there was one slight hæmorrhage. The child had become steadily whiter and feebler. She now had that peculiarly immobile, waxy appearance of extreme anæmia, and without further bleeding she died on the following day.

At the *post mortem* examination an ulcer was found on the duodenum very near the pylorus. Seen from the outside the ulcer showed as a grey circular patch, perhaps 2 mm. in diameter, and around this the blood vessels were deeply injected. A blood clot filled this part of the duodenum, and at the place of ulceration the wall was found to be extremely thin. There was neither air nor free fluid in the abdominal cavity, nor were there any adhesions about the ulcer. No other lesion was found.

On thinking it over, it seemed to me that it would have been better if I had given a larger dose of serum to start with, so in the next case I gave 5 cc. of serum as soon as possible after the first hæmorrhage.

In this case, also, the child was a girl—7½lbs. weight, length 21in.—and the mother was a healthy multipara of 39 years. The first hæmorrhage occurred about 52 hours after birth. I was unable to obtain horse serum on this occasion, so used anti-diphtheric serum, giving 5 cc. straight away subcutaneously. This was early in the evening, and during the night there were two more hæmorrhages. The next day there were three slight hæmorrhages and a second dose of serum was given, rather less than 5 cc., and after this there was no more bleeding. Adrenalin was used in this case also.

The child was given nothing but water by the mouth until 16 hours after the last hæmorrhage. By the fifth day she had apparently recovered altogether, and nursing was resumed without further trouble.

It is always difficult to compare two cases, but at the time it did not seem to me that the second child was any better off than the first during the early stages, except that she was a larger and stronger infant. In each case the illness began with three fairly large hæmorrhages within twleve hours, and whether the subsequent developments were due to the difference in the physique of the infants, or whether in the second case the hæmorrhage was really controlled by the larger dose of serum, it is impossible to assert.

With regard to diagnosis, a point of importance is the almost entire absence of vomiting. Diagnosis would seem to rest solely upon the occurrence of massive hæmorrhages per rectum.

Although intestinal hæmorrhage is not so very uncommon in the newborn, yet I cannot find record of any cases of duodenal ulcer in infants under one month old. Veeder, of St. Louis, reported five cases a year ago occurring in infants between one and six months of age. He considered the ulceration as indirectly due to alimentary decomposition, because he found it associated with chronic intestinal disease. In all his cases the hæmorrhage was associated with vomiting.

(*a*) We have now administered more than 200 injections of colloidal gold, not only in cases of rheumatism, but also in those of other infections, both medical and surgical, including cases of gaseous gangrene accompanied by deplorable general conditions. The accident above recorded is the only unfavourable one we have hitherto met with.

* A paper read before the Section of Obstetrics and Gynæcology, Royal Academy of Medicine in Ireland, February 11th, 1916.

In an infant whose life is measured in hours it is difficult to conceive of an infective origin of the ulcer. I would suggest that the trouble might be due to a premature gastric secretion, and that probably the acid of the gastric juice is to blame rather than its peptic quality, for if pepsin can digest duodenal mucous membrane, why does trypsin never do so a little lower down? The duodenal mucosa is irritated by the unaccustomed hydrochloric acid, and presently eroded. The erosion proceeds until some vessel is opened and bleeding begins. If conditions be unfavourable, hæmorrhage will now continue until the child is bled to death; but in a favourable case the blood issuing from the small vessel will clot, so that the clot covers the injured area and, protecting it from the gastric secretion, allows it to heal.

A healed duodenal ulcer has been found *post mortem* in an infant five months old.

Of the immediate complications of duodenal ulcer, perforation is rarely met with in infants, while hæmorrhage is the usual sequel. Payr, of Leipsig, attributes this to the fact that the ulcer forms, as a rule, on the posterior wall of the duodenum, due to gravitation of the HCl in the recumbent position of the infant. It is well known that in adults ulceration of the anterior wall of the duodenum leads to perforation, whereas ulceration of the posterior wall leads more commonly to hæmorrhage.

With regard to treatment, we have three objectives :—

(1) To avoid stimulation of the gastric secretion;
(2) To induce coagulation;
(3) To support the infant's strength;

and the points of treatment which appear to me the most important are the immediate administration of serum subcutaneously (I have no experience of its use by the mouth) and in large doses, repeated once or twice if necessary, the giving of nothing but water by the mouth, and the maintenance of absolute quiet and warmth.

The value of adrenalin I do not know; and as to surgical interference, it hardly seems justified until the medical treatment has been given a trial. If that fails it is, as a rule, too late to operate.

I wish to thank Dr. Tweedy for his courtesy in allowing me to report these cases; they occurred during the months of his Mastership at the Rotunda, and were treated under his direction.

RECENT WORK ON THE BACTERIOLOGY OF RHEUMATOID ARTHRITIS AND ITS TREATMENT.

By A. E. VIPOND, M.D.,
Senior Physician to the Montreal Children's Hospital, Montreal.

IN the year 1906 I read a paper, in the Section of Pediatrics, at the annual meeting of the British Medical Association held in Toronto, entitled "The Early Diagnosis of Infectious Diseases by the Recognition of the General Involvement of the Lymphatic Glandular System" (*British Medical Journal*, December 15th, 1906). Since that time I have repeated and enlarged upon this theory and presented a paper before the Canadian Medical Association, held at Montreal, June 7th, 1911, entitled "Scarlet Fever, a Preliminary Note on a Specific Micro-organism" (*Canadian Medical Association Journal*, July, 1911). In June, 1914, Dr. J. Hayne, of South Carolina, chairman of the pellagra committee in connection with the 29th annual meeting of the Conference of State and Provincial Boards of Health of North America, held in Washington, D.C., June 19th-20th, 1914, read a paper for me entitled, "Some Experiments in the Production of Pellagra in Monkeys" (reprinted report of Pellagra Committee, State of Provincial Board of Health of North America, 1914). Recently at a meeting of the Montreal Medico-Chirurgical Society at which Dr. L. J. Rhea read a paper on "Some Recent Findings in Hodgkin's Disease," in the discussion which followed I made the statement that I had recovered a short bacillus from the enlarged nodes of a patient suffering from lymphatic leukæmia. I inoculated a monkey with a broth culture and in 72 hours the glands were enlarged and a large ecchymosis was present over the abdominal wall. The blood changes were marked and the monkey died in less than 80 hours, and from the nodes I recovered the same bacillus. A vaccine was prepared from this bacillus and after the first inoculation the patient's nodes reduced fully 50 per cent. in size and in about one month's time he returned to work. However, I left town and the vaccine was not given regularly and the patient died about four or five months later. (*Canadian Medical Association Journal*, May, 1915.)

In the above papers I maintained that the lymphatic nodes are Nature's incubators where organisms multiply and thrive and send out into the blood stream chemical toxins which accumulate and produce the disease, the symptoms depending upon the chemical characteristics of the toxin or toxins derived from the micro-organisms which are situated in the enlarged nodes. In acute infectious diseases the lymphatic nodes are enlarged and are painful on pressure. This enlargement begins shortly after the organism enters the system by way of the tonsils, which I regard as the portal of entry. I have made a diagnosis of incubating measles fully ten days before the rash developed. I have found the nodes to be enlarged in all acute infectious diseases. In the many cases of pellagra which I have examined I have found the nodes enlarged in nearly every instance.

In rheumatoid arthritis many observers have found bacilli, streptococci, etc., in the blood, the joints and in pyorrhœa alveolaris. In the Special Rheumatism Number of *American Medicine* for June, 1915, is an admirable and full description of rheumatoid arthritis. The articles in this number have been written by the pioneers and most advanced research workers on this subject, but in the medical literature I cannot find any reference to any organism being recovered from the nodes of patients suffering from rheumatoid arthritis. I examined the nodes of patients who suffered from this malady and found them to be enlarged in nearly every instance, the largest being the vertical inguinal nodes of the left side, in many cases as large as a small walnut. In one or two instances, however, I could not palpate a node in any part of the body.

The following shows the bacteriological findings in twelve cases. I may state here that I have found two organisms which I am inclined to believe are associated organisms and that both take a part in producing the signs and symptoms of rheumatoid arthritis. I obtained diplococci or small thin bacilli, either alone or combined, in ten cases, the other two cases gave negative results. Altogether I am inclined to think that the diplococcus is the primary organism and that the bacilli play a secondary part. In my next paper, which will appear shortly, I shall give a full description of these two organisms. However, I may state here that the diplococcus which I obtained from the nodes of these patients is unique and stands in a class by itself. The primary culture is of very slow growth, taking three days to appear as a delicate sparse growth on the surface of the blood serum.

The bacillus grows fairly quickly; it is a short, thin, spore-bearing bacillus.

Case 1.—Patient a little Scotch woman who has suffered from the disease for over twenty years; she was confined to bed when I saw her, where she had been for some months, nearly all the joints of the body being involved. The patient suffered greatly and had to be given morphine repeatedly to enable her to get rest. For some years back had been unable to comb her hair or button her skirt; was much emaciated. The nodes were greatly enlarged and I obtained lymph from both the vertical and horizontal nodes in the groin. I inoculated fully six blood serum tubes and at the end of the third day a sparse growth developed on four of the tubes and diplococci in pure culture were recovered. A vaccine was made and I inoculated the patient with 200,000,000 dead organisms; this was increased gradually to one billion which was given every four or five days. The reaction was marked, slight temperature, increased pain in joints and delirium. After the third day, however, the patient felt better and improvement has been steady until at the present time she does not suffer any ache or pain, walks well, does her own housework, sleeps soundly and is heavier than she has ever been. The nodes gradually reduced in size; in about two or three months' time I inserted a needle into an inguinal node and obtained a mixed culture of diplococci and a thin short bacillus; after six months it was with difficulty that I could palpate the gland. However, I obtained lymph and inoculated several tubes and got no growth at all.

Case 2.—Mr. C., a little over 50 years of age. The nodes were much enlarged but here I obtained no growth. When he came under my care his condition was far from being one of comfort; nearly all the joints were involved, he could not feed himself, or shave, or light a match. He came to see me on crutches but with considerable difficulty owing to the swollen and painful condition of the joints of his arms and hands. He was confined to bed for weeks, suffered great pain and could not sleep. I inoculated him with the diplococcus organism obtained from the first case and in a short time he showed much improvement. At present, after three or four months' treatment, his condition is very satisfactory. He can work his farm and claims that he can run, and his grip is good, while he now shaves himself with ease and sleeps soundly.

Case 3.—This case is of considerable interest. About one year ago Mrs. J., a stout, healthy-looking woman, came under my care suffering from acute inflammatory rheumatism. I treated her with sodium salicylate 20 grains, sodium bicarbonate 40 grains, every two hours. In spite of this, however, she developed endocarditis. The condition continued for about five weeks when she left for home. Later the rheumatism recurred and she continued with the treatment. The metacarpo-phalangeal joints, however, remained swollen and painful and the phalangeal joints were in the same condition and no treatment seemed to help her. I decided that I was dealing with a case of rheumatoid arthritis which had become engrafted upon the rheumatic joints. I inoculated her with the diplococcus organism, giving 500,000,000 as a primary dose and in three days the swelling had nearly entirely disappeared. She was given a second dose of 750,000,000, and she left for home feeling quite well. The result was rapid in this case as I was dealing with the early stage of the disease—we cannot expect to get this result in conditions which have lasted for 15 or 20 years as in the foregoing two cases.

Case 4.—Mr. C., æt. about 38. Here most of the joints were involved, he suffered a great deal and could not put his coat on by himself or shave and was able to walk only with difficulty. He had lost his position on account of this disability. He was given two inoculations of the short bacillus and four or five of the diplococcus. He is now at work again, feels well, can put on his coat and shaves with ease. I gave him 500,000,000 as a primary dose and increased to 1,500,000,000.

Case 5.—This case is under my care at the present time, having suffered from rheumatoid arthritis for over ten years. Most of her joints are involved and a great deal of her time has been spent in the house; she suffers greatly. I gave her two or three doses of the short bacillus without any benefit. She was then given four or five doses of the diplococcus with the result that she is now showing marked improvement, feels better than she has done for six years, can walk down stairs without any help and I expect to have a complete recovery in this case.

Case 6.—This case is one of considerable chronicity lasting over 20 years, and the patient has suffered greatly during that time, with occasional remissions. She has tried every form of treatment: hot baths at the south, Schaeffer's rheumatic vaccine, and a vaccine made of the colon bacillus, but the disease has gradually progressed; the hands and knee-joints are the parts which are most affected. The X-ray picture shows a marked and chronic condition of this disease. I gave this patient the diplococcus and later tried the short bacillus but improvement has been slow and at the present time I am giving her the diplococcus and bacillus vaccines combined. I cannot claim much for this case, but comparing her condition with this time last year she does not now have the intense suffering experienced on wet and damp days which now pass without influencing her condition, and I may add that there has been a great improvement in her general state. I obtained from this patient the short bacillus from an enlarged node. We are, however, encouraged to continue the treatment in this case.

Case 7.—Mrs. P., who has suffered from this disease for over ten years; both knees, shoulders and elbows are involved. She is over 55 years of age, and for years has walked with difficulty and has suffered greatly. After receiving 15 to 20 inoculations she can now walk with ease, without pain, and states that she feels like a new woman. I expect to obtain a complete cure also in this case. I may state that I gave her inoculations of the short bacillus which produced no improvement, but the improvement after using the diplococcus was marked, rapid and permanent.

Case 8.—This was one of the severe chronic cases, nearly every joint being involved. There was marked deformity of the hands and feet, the elbows, ankles, knees, hips, and spine were all affected, as also were the thyroid cartilage and laryngeal rings. The patient had not raised her head from the pillow for seven or eight years and rotation of it was impossible. There was a constant accumulation of mucus in the bronchial tubes. She has had five or six injections of the short bacillus and the same of the diplococcus organisms and I am pleased to say she can now sit up and has even been out of bed. Most of the joints show a marked improvement and she can rotate her head with ease.

Case 9.—Mrs. D., an old lady of over 70 years of age. She has had inoculations of the diplococcus organism, is now out of bed and shows marked general improvement; she can move her hands and arms much better and without much pain.

Cases 10, 11, 12.—In these I have found the diplococcus and will begin the treatment in a short time. Two of the cases are in Columbia, South

Carolina, one giving the diplococcus, the other the short bacillus. I have to thank Dr. Pope and Dr. J. Watson for referring them to me. I have other cases under observation which I will treat in the near future.

As I have found this identical diplococcus in the urine of patients suffering from rheumatoid arthritis I had a vaccine made from it but cannot claim any results from its use. I believe, however, that at one time or another the urine from rheumatoid arthritis patients will show this diplococcus, but I think that by the time that Nature excretes this organism from the kidneys it has become attenuated and will not produce toxins to any extent. In fact, it has become practically non-pathogenic.

Most of my good results have been obtained by giving the diplococcus organism. The question arises, why can I not obtain the same results by using the short spore-bearing bacillus? This bacillus produces spores which are most resistant to heat and also to a small percentage of phenol, and I am afraid that the amount of phenol used destroys the toxins and thus we cannot look for any results from the use of this bacillus until we can devise some other and safer method of destroying the bacilli without rendering the toxins inert.

CONCLUSIONS.

1. In ten out of the twelve cases of rheumatoid arthritis I have recovered organisms from the enlarged nodes, one being a diplococcus and the other a thin short bacillus, either in pure culture or mixed. A vaccine made from the diplococcus produces a cure or a marked improvement in the local and general lesions and symptoms in patients who suffer from rheumatoid arthritis. A vaccine made from the short bacillus improves the general condition and lessens the pain.

2. In the early stages of the disease—that is, up to the third or fourth year, before the grave articular changes have taken place in the joints, we can hope for return of the joint function, absence of pain and disappearance of swelling around the joints. In the chronic cases of 15 or 20 years' standing, we get a marked improvement, the pain disappears, the joint function improves and the patient increases in weight and feels well. (Case 1., Mrs. P.) and these encouraging results have been obtained by the use of the diplococcus vaccine.

3. The diplococcus has been found in the urine as well as in the nodes.

4. Cultures obtained from the nodes after four or five months' treatment in severe cases and in much less time in early cases were negative notwithstanding the fact that the diplococcus has been found in the nodes before treatment began.

5. In early cases we can look for results after three to four inoculations: in the chronic cases one may not detect much improvement before two or three months' treatment.

6. In chronic or advanced cases we cannot expect to restore articular cartilages or to produce new joints. However, we expect to get an absence of pain, increased motion and lessening of swelling.

7. The initial dose for an adult should be 150,000,000 to 200,000,000, increased rapidly to 300,000,000, 400,000,000, 500,000,000, 750,000,000 100,000,000, to 1,500,000,000. However, the dose will depend upon the reaction and general condition of the patient and should be administered every three to four days. It may have to be continued for months. I may state here that I do not look for a reaction in every case, and a marked reaction, that is, temperature, pain, is not necessary to produce results.

I think that the results obtained by the use of this diplococcus in rheumatoid arthritis patients warrant me in believing that it is the principal organism which causes this disease, and considering that the disease is progressive and that no known medicinal treatment will give the same results, I think that the value of the above treatment is evident.

Since writing the above paper, Case 6 shows marked improvement, the progress of the disease has been entirely arrested. This patient is receiving doses of from eleven to fifteen billions of the diplococci, with marked reaction.

I have at present under my care a delicate young girl, sixteen years of age, who is almost cured. She has been receiving five to six billions diplococci per dose.

After giving patient three or four of these heroic doses it is well to stop treatment for a week or ten days.

WOUND DRESSINGS.*

By DOUGLAS H. STEWART, M.D., F.A.C.S.,
New York.

IN order to study wound healing, the writer of this paper took charge of a surgical clinic which furnished a minimum of twenty septic patients per day with as many additional ones as he could attend in the time at his disposal. Unhealed laparotomies and other operative wounds, gangrene, burns, lacerations, contusions, punctures, incisions, railroad, machinery and traffic accidents and their consequences would make up most of the list of cases. A battlefield, after a cavalry charge, would give a fair picture of the state of things which was encountered. For there the least injuries would be those inflicted by the sabre and rifle, but human flesh would be smashed out of semblance by the flying and contaminated hoofs of the troop horses, or would be crushed and poisoned by the mud-befouled rim of the rolling wheel of the light artillery and of the ammunition wagon.

Many septic cases came together, because experience with non-adherent bandages resulted in one appreciative patient bringing some injured friend with him on his return to the clinic. To quote a nurse, "The non-stickers became stickers," meaning that the patients remained under observation until recovery was complete. Those who did wander, as such people invariably do, only required to have an adherent dressing torn off an unhealed wound in some other clinic, or elsewhere, and they came back without hesitation.

Boils and carbuncles furnished three essentials for study—viz., infection, suppuration, and necrosis. To make two boils grow where one grew before, or to make a ring of satellites about a centre, one had but to scratch the adjacent skin, cover with a flax-seed poultice, and leave the rest to nature. They prove to be excellent examples of local pyogenia, which was aggravated or endurable according to a bad or good bodily state. A number of able surgeons have considered that the application of a chemical antiseptic to an infected wound is of small value; to this I agree, at least to this extent: In my experiments any antiseptic which would not arrest a boil was not considered worth trying in the depths of an infected wound, and its laboratory antiseptic index proved to be but a poor guide to its clinical employment, if its application irritated, and thus hastened, the course of a boil. To quote one of the House Staff: "If you get a boil with your antiseptics you get it quick, or you don't get it." His meaning is quite correct. Anyone who is treating an infection is either making it better or worse.

* Read at the 28th Annual Meeting of the A.A.O. & G. at Pittsburg, September, 1915. *American Journal of Obstetrics*, February, 1916.

Consumers of large quantities of cheese almost invariably went to the bad when they left the hospital for home. Both boils and wounds seem to resent this article of diet. Its heavy charge of nitrogen, or something else, acted disadvantageously despite all and numerous favourable reports upon its great food value. Lemon juice and orange juice were beneficial both locally and internally. Mineral acids, calcium sulphide, etc., gradually were supplanted by the old-fashioned syrup hypophosphite compound cum ferro, and this appeared to deserve the high repute in which it was held by our forefathers. When lemon juice with soda bicarbonate (or citrate of soda plus carbonic acid) stopped a boil after bichloride had scored a failure, then one was shocked, and the idea was brought home that possibly the "Antiseptic Index," as compiled from the findings of the test tube and Petri dish, might read backward when tried at the bar of clinical experiment and upon septic human flesh.

If the patient must return to a tenement house environment, before recovery is absolute, then the nearer the operator's incision approaches the vertical the better. Infected Pfannenstiel incisions proved slow of healing. Celluloid linen irritated tissues much more than plain material. Large sizes of catgut were a nuisance. The Pagenstecher ligature could usually be lifted up, the loop cut, and the whole pulled out; but the catgut, when macerated, would frequently leave unobtainable pieces behind. One woman said that the silkworm-gut stitches in her cervix had been there for a year. They were removed, and apparently had not caused any trouble. Union was good. Two laparotomies cast out silk stitches months after an apparent healing. Finer or firmer cicatrices could not reasonably be expected. Wounds with their blood-vessels ligated with catgut and the whole closed with silk in every instance showed deep infection first, and presumably it started in the catgut, but whether the catgut was plain or antiseptic there was no way of determining.

Tracing the source of things with patients coming from different hospitals, cities, and states, proved futile and was early abandoned. This paper gives findings, merely. The use of absorbent suture material is something each operator must settle for himself. I am using cutgut, but am also looking for the arrival of a day when its use will be abandoned, possibly with the same rapidity which marked its adoption. If linen thread is treated by frying at 340° F. or over, or small-sized catgut is immersed in biniodide of mercury, iodide, glycerine, and alcohol for thirty or forty days, there is no fear of their containing germs. It may be easily anticipated that those germs which can withstand boiling, in spore form, do not withstand an additional 130° of heat. All stitch fistulæ and post-operative herniæ followed the use of catgut, the all but universal use of which rendered contrast with other material impossible.

Three things tended to prevent primary union—(1) stitch traction with more or less necrosis; (2) irritation, including the caustic and tanning powers of iodine; (3) healing tissues are embryonic and fair game for infection or malignancy.

As to the first. It is hard to understand why someone has not used Dr. Alfred H. Gould's reverse mattress stitch to close fascia or aponeurosis. (1) The needle is inserted twice toward the incision and twice away from it. The result is a sort of square purse string that will not pucker, but pulls flat. In other words, it is a perfect reinforcement to the central stitches.

In regard to No. 2. Let anyone make two cuts or incisions, paint one with tincture of iodine and the other with boiled water. Barring infection, that person will discover that the iodine test does very well indeed if it only takes twice as long to heal as the other. Iodine tanning is something like the mechanical device called the pulley—speed is sacrificed for efficiency. Suppose water containing 20 per cent. of glycerine be used to dilute the tincture of iodine to 1 dr. of the latter in 1 oz. of the mixture, then we find the tissues no longer becoming stiff and friable after its application. Suppose, again, that we have added calomel 1 part to tincture of iodine 1,000 parts. Just what the chemical result is, is a matter of difference of opinion on account of the presence of potassium iodide. It has been called biniodide of mercury, a tetraiodide, etc., but the germicidal power is increased tenfold for clinical or wound work and twentyfold for laboratory or test-tube work. This does not mean that it is inefficient in weaker solutions, because it is efficient, but the figures are easy and convenient to use. Let the skin wound be filled with the aforesaid solution just before fastening the subcutaneous stitch. Then fasten that stitch, wash all off with a saturated solution of perborate of soda and make the outlook for primary union excellent.

Some wounds refuse to heal until peroxide cleansing is discontinued. The offending element in the commercial solution of peroxide appears to be sulphuric acid, a preservative addition. At least, dry, red-edged wounds are sequential upon the application of dilute sulphuric, and absent when the H_2O_2 solution is neutralised with bicarbonate of soda.

Patients, said to be 95 per cent. well when sent home from various hospitals, had applied iodine or peroxide, or both, for various periods up to 90 days, and then they came into my hands with skin tanned or destroyed, with the depths of their wounds furnishing a purulent discharge or with gaping cuts filled with fungoid granulations. *Prima facie* appearances warrant the query: "If no antiseptic had been employed would the ultimate results not have been better?" It is easy to fill a wound with the peroxide solution and, upon a probe introduced right through the bubbling mass, obtain vigorous cultures. The solution is only a cleanser and, if neutralised just before using, does not do much damage. But ask any genito-urinary man what a pleasant time he has in cleaning up after a general practitioner has thoroughly and persistently used H_2O_2 in the male urethra. Ask him which has made that urethra the sorer, the remedy or the infection?

A chemist, engaged in the manufacture of bleaching materials, brought to my office everything he required to make peroxide. We spent three evenings in our endeavours to sterilise our purposely contaminated hands. We did not find any appreciable difference between tests and controls when our cultures were developed. But we did run the strengths of our solutions up to the limits of our skin tolerance; the bleaching power was good, the antiseptic influence nil. Cleaning up an iodine-painted wound with H_2O_2 does make for healing by washing away the excess of iodine, not otherwise.

As to statement No. 3. Immediate union is probably impossible of acquirement, but the chances of its occurrence are increased if the dresser is as careful in his *technique* as was the operator. Lymph coagulated by iodine may form a shield, but not a union any more than lymph, entangled in the meshes of gauze and then torn off, can make a true seal for any wound. Attempts at asepsis which are not backed up by a trained and disciplined staff working with intelligence, in a favourable environment, are delusions, snares and myths. Antisepsis

(1) See "Operations on the Intestines," page 85, for description.

may be brought about by clumsy or careless fingers. Asepsis never can be unless by pure chance. In short, the precautions of the dresser must never fall below the level of the operating-room standard; or if they do so fall, asepsis should be abandoned and antisepsis initiated.

Packages of wipes of the usual size may be fried for twenty minutes, laid on a sterile tray, and only unwrapped after the operation is completed and the final wound cleansing with perborate of soda is begun. Then any number of such sterile (175° C.) wipes may be placed in contact with and about the closed and cleaned incision. Powders, such as thymol iodide (aristol), are neither necessary nor objectionable, and the wound may be left undisturbed until the eleventh day; or, inasmuch as the fried gauze does not stick nor its removal tear off the scab, the dressings may be removed and the wound dressed with the iodine, calomel, glycerine solution on the third, fifth, seventh, ninth, and eleventh days. The former is good, though called the "lazy man's way"; the latter gives equal results because of the non-adherent bandage. Choice seems a matter of indifference and union is obtained with either method. Because iodine is widely used, I wish to know the best way to use iodine, but far be it from me to blow a trumpet for iodine. Nor do I expect anyone to admit that his results are any better to-day than they were in his pre-iodine days. The men who are using iodine are so wedded to it that the suggestion of any other substance might involve a neglect of the powerful factor of personal equation, which makes a first-class man, using a familiar but second-class method, more than equal to a second-class man employing unskilfully a first-class method. Perhaps the answer to all such questions may be found, as suggested elsewhere, in experimentation with boils rather than with test-tubes.

A mere surface disinfection and healing may permit the disadvantage of an unchecked germ propagation in the depths of a wound. A non-fistuloid and altogether better condition of affairs would be obtained by maintaining an open wound from the very start. Chemistry is not our only guide. Dr. Sexton had any number of infected vaccinations in the Willard Parker Hospital, and found the local application of bacterins the very best method of treatment. This works well upon septic wounds, but the cost prevented my making more than a few dozen applications (exact number, seventy-five).

Allantoin is wonderful as a wound healer, even though not at all a chemical antiseptic. Its employment is simply a putting of the active principle of embryonic tissue upon embryonic tissues. It acts as though it made the wound furnish its own antibodies and thus clean itself. Strange to say, irritation or its absence does not sum up the whole matter, for 1 to 3,000 of nitrate of silver either in kaolin or water is an irritant antiseptic, and yet, at the same time, a stimulator of the healing processes.

Summary.—Fried ligatures, drains, pads, etc., do not adhere to wounds.

The non-adhesion allows of unlimited wound inspection and fosters healing.

The best way to treat wounds may be easily discovered by experimentation with boils.

If one wishes to use iodine, add calomel 1 to 1,000 to the tincture, and 1 dr. of this mixture and an equal part of glycerine to 1 oz. of water. This will prevent tanning and will permit penetration of the tissues.

If the patient has iodine idiosyncrasy, or if for any reason the wound does not do well, then abandon iodine at once and substitute 11 to 5,000 nitrate of silver or anything else that you deem its equal.

There is just as much difference in the wound healing of two different patients as there is in two pneumonias, two typhoids, or two gouts.

Routine treatment may be all right, but frequently it is not; therefore, if the patient is to use H_2O_2 plus iodine, the results to be anticipated from his, or her, own personal application are either good or deplorable; there seems to be no middle course.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

TREATMENT OF NERVOUS DISORDERS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I have read with much interest Dr. Percy Lewis's article in THE MEDICAL PRESS AND CIRCULAR, March 1st. I can cordially agree with practically every word he says, and venture to say that, in addition to the omissions he points out, I find neurologists sternly ignore, as a rule, the great benefits that may be procured by active treatment of the back along the spinous processes of the vertebræ and on each side of them. Some time ago a neurologist showed a patient at a meeting at which I was present. The case was one of disseminated sclerosis of the spinal cord. Considerable improvement in muscular power of the limbs had been secured by massage *to them only*. I asked if the back had been specially massaged, but the answer was "No." In the *Medical Times*, October-December, 1914, I published an article entitled "Continuous Counter-Irritation in the Treatment of Nervous and Other Diseases." I enclose a reprint, and you will see that in the first few pages I express views which very closely fit in with those of Dr. Lewis. I shall be pleased to send a copy of the reprint gratis to any of your readers on request.

I am, Sir, yours truly,
W. J. MIDELTON.

Bournemouth, March 22nd.

[We are well acquainted with the work of Dr. Midelton, and can support his claim that his views and those recently expressed by Dr. Percy Lewis are very similar.—ED., M.P. and C.]

IRISH COUNTY COUNCILS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Practically all the medical men outside two or three big towns are shut out of our County Councils by an illegal regulation of the Local Government Board. I appeal to the profession to support me in an application to the Courts to deal with this invasion of our elementary civic rights. Our impotence in season and out of season is all due to our non-assertion of our civic claims. Why do we not take a lesson from the lawyers?

I am, Sir, yours truly,
THOMAS LAFFAN.

Cashel,
March 22nd, 1916.

THE PSYCHOLOGY OF THE CONSCIENTIOUS OBJECTOR.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—With reference to Dr. T. Claye Shaw's article on "The Psychology of the Conscientious Objector" in the March 22nd MEDICAL PRESS AND CIRCULAR, is he not taking science over its boundary and into the region where it "won't work"? For when so learned a gentleman says

that there is "no such faculty" as "conscience," "moral sense," or "instinct," the defence of such a statement is likely to land him in hopeless difficulties. May I ask why he wrote this article? Surely it was not to get a page in your valuable journal, but because his "conscience" or "moral sense" urged him to state opinions of the conscientious objector which he considers are correct.

I am afraid that Dr. Claye Shaw, like many others, is giving an opinion of these people based on what people consider them to be instead of what they really are—viz., a deeply spiritual, clear-minded lot, who act on their reason and "moral sense" rather than on their emotions, and who object to taking any part in murder, and cannot see that because murder is organised and sanctioned by the law of the land that it is less ungodly.

We—yes, *we*—who are perhaps members of the Society of Friends, progressive thinkers or Socialists, etc., as well as our professional calling or trade participants, are making a stand against this wholesale orphan-producing, cruelty-concocting machine by absolute refusal to taking any part in it.

I, myself, am on the verge of possible punishment for taking this stand, but that in no way reduces my determination to obey my "conscience" and "moral sense" rather than man-made laws.

It is unusual, I know, for anyone other than qualified medical gentlemen to write to you, Sir, but as this is a question that directly concerns the persons known as "conscientious objectors," I am taking the liberty.

I am, Sir, yours truly,

Cotham, Bristol. G. Percy Biggs.
March 25th, 1916.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Ophthalmological Section.

Meeting held March 22nd, 1916.

Sir Anderson Critchett, Bart., C.V.O., in the Chair.

Colonel Lister, A.M.S., C.M.G., and Lieut.-Col. Gordon Holmes, M.D., R.A.M.C., read a paper entitled

DISTURBANCES OF VISION FROM CEREBRAL LESIONS, WITH SPECIAL REFERENCE TO THE CORTICAL REPRESENTATION OF THE MACULA.

The authors stated that in their work at the base hospitals in France during the past eighteen months they had observed a very large number of cases in which the vision was affected by lesions of various portions of the optic system, but the time and opportunity afforded have not been sufficient for careful and complete examination of all. Hence, in some cases of considerable clinical importance only scanty and incomplete notes had been secured. Still, by selecting for thorough examination a certain number of suitable cases, a group of facts had been collected which had an important bearing on the cerebral localisation of vision, more particularly on the representation of different regions of the retina in the cortex. It might be objected, say the authors, that as the observations were, necessarily, made at an early stage after the infliction of the injury, some of the effects observed may have been due to functional disturbances, rather than to local injuries of the corresponding cortical areas or their centripetal fibres. But if it could be shown that there was a constant relation between the probable site of the injury and the form of the visual defect, certain general conclusions would be at least justifiable.

The injuries in the cases referred to included penetrating and perforating wounds of the cranium by rifle bullets, shell fragments and shrapnel, as well as local concussion and depressed fractures. They remarked on the striking rarity of superior quadrantic hemianopia in gunshot wounds of the occipital region.

The authors point out that in over two thousand cases of head injury they never saw a central scotoma when a direct injury of the occipital poles could be excluded, and they regard this as striking evidence that central vision is represented on either or both, the mesial or the lateral surface of the posterior borders of the occipital lobes. And the observations conformed to the general view that the visual area corresponds with, or at least includes, the area striata.

The interesting question is raised in the paper as to whether vision for colours may be dissociated from that for white: in other words, whether an achromatopsia can be produced by cerebral lesions. They consider, however, that they have gleaned no conclusive evidence that achromatopsia, with intact vision for white, is produced by cerebral lesions which involve either the cortex or the optic radiations.

The authors' conclusions, which they do not yet regard as final, are formulated as follows:—

(1) The upper half of each retina is represented in the dorsal, and the lower in the ventral, part of each visual area.

(2) The centre for macular or central vision lies in the posterior extremities of the visual areas, probably on the margins and the lateral surfaces of the occipital lobes.

(3) That portion of each upper quadrant of the retina in the immediate neighbourhood of, and including the adjacent part of the fovea centralis, is represented in the upper and posterior part of the visual area in the opposite hemisphere, and *vice versa*.

(4) The centre for vision from the periphery of the retinæ is probably situated in the anterior end of the visual area, and the serial concentric zones of the retina from the macula to the periphery are probably represented in this order from behind forwards in the visual area.

The contribution concludes with a grateful acknowledgment of the assistance received by the authors from the medical officers of the various hospitals in which the cases were observed, and their thanks to Captain Curtis Webb for help in the preparation of the illustrations.

The Chairman, in expressing the gratitude of the Section to the authors for their painstaking research, referred to the rapid strides made by brain surgery, and the unexampled opportunities afforded by the present conflict to make advances in surgical and medical knowledge.

Lieut.-Col. Elliott asked whether Colonels Lister and Holmes were able to confirm the estimate as to the efficacy of the steel helmet in preventing head injuries. He also referred to the greater severity of wounds inflicted by bullets which struck in the first 250 yards of their flight, before they had settled down to a steady onward course, as compared with those which found their billet at distances between 250 and 1,000 yards.

Captain Ormond suggested a possible confirmation of the authors' thesis in the central scotoma met with in some people who were subject to megrimous attacks. It was probably a vascular phenomenon, dependent upon the macular centre being placed at the posterior pole of the occipital lobe.

Mr. Leslie Paton urged ophthalmologists in this country who received cases from France after the shock and the acute symptoms had subsided, to exercise great care in the taking of the fields of vision and the construction of perimeter charts (though not with the McHardy perimeter), and follow the cases up as far as possible, keeping a record of their sequelæ, and in that way assist in making the investigations of Colonel Lister and Lieut.-Colonel Holmes of abiding value.

Mr. J. H. Parsons agreed with Mr. Paton, and asked that when ophthalmic cases were sent over, the notes of the cases should accompany the patients.

Col. Holmes briefly replied, remarking that as the steel helmets had only recently been issued to the British Army it was as yet too soon for conclusions to be drawn.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Obstetrics.

Meeting held Friday, February 11th, 1916.

The President, Gibbon FitzGibbon, M.D., F.R.C.P.I., in the Chair.

UTERINE SARCOMA.

The President showed a uterine sarcoma removed from a patient, æt. 51. There had never been any menstrual abnormality, and the menopause occurred between 45 and 46 years of age without incident. Five months before operation the patient developed uterine hæmorrhage, which came on regularly and frequently, and for five weeks had been continuous; the only other symptoms were due to the pressure of the tumour in the pelvis. On examination a symmetrical tumour was found reaching nearly to the umbilicus, and suggesting fibroid of the uterus. Total hysterectomy was performed. On opening the uterus the cavity contained a pure white lobulated mass, brainlike in consistence, the centre of which contained blood-clot. Microscopically the tumour was a round-celled sarcoma. He referred to another case of fibro-sarcoma removed from a girl, æt. 27. Both tumours were cystic. It was not possible in either case to diagnose sarcoma as distinct from fibroid before removal, though at operation the probability was suggested by the softness of the tumour in the case shown and by the impossibility of enucleation in the other case.

Dr. Alfred Smith stated that his experience was that pain seldom occurred in the early stages of diffuse sarcoma, but it was an early manifestation in fibro-sarcomata. He recalled cases of polypi projecting through the os in which pressure of the examining finger burst a thin limiting membrane which formed the capsule of the polypus. The presence of this membrane he considered characteristic of sarcoma.

Dr. Rowlette considered that the tumour originated in the endometrium; this form was most frequent in his experience.

Dr. Solomons said that although text-books referred to sarcoma as a disease of early life, the experience in this country was that it occurred most commonly about or after the menopause.

EXHIBITS.

Sir A. Horne showed (1) surgical needle removed from perineum; (2) fibroma with double pyosalpinx.

Dr. Hastings Tweedy remarked on the very small size of the needle which had been employed to stitch the perineum. Its great delicacy proved the undoing of the doctor who used it. It was no surprise that it should have broken, but it was a surprise to find that there was at present a practitioner who believed that any successful results could be achieved by superficial stitching with a diminutive needle.

Dr. Alfred Smith said that the case of double pyo-salpinx raised the important point as to the period after infection at which it would be safe to operate. Sir A. Macan taught that the tube contents became sterile twelve months after infection. His (Dr. Smith's) rules for operation were as follows:—A period of at least three months must have elapsed from the date of infection; the temperature must be normal and the tubes mobile; there must be no rise of temperature following a bimanual examination.

ABDOMINAL PREGNANCY.

Dr. Solomons recounted the history of a case of the above in which he concluded that the cause of the condition had not been established, that diagnosis was extremely difficult, and that the best treatment was to operate immediately the case was diagnosed.

Dr. Alfred Smith recalled a case which had occurred in his practice. The danger from hæmorrhage in separating the placenta was very great. He suggested the advisability of primary ligation of the corresponding internal iliac artery before proceeding with the separation of the placenta.

Dr. Hastings Tweedy said that in view of the operation described in his paper by Dr. Solomons, and a specimen shown previously by the President, Dr. Gibbon FitzGibbon, he thought the time had arrived to review preconceived impressions respecting the fear of operative procedure in abdominal pregnancy. He thought with Dr. Solomons that the proper way was to tie off all vessels which fed the placenta, dealing with them one by one as they came into view, rather than endeavouring to ligate some large artery which might theoretically be supposed to feed all the placental branch vessels.

Dr. Solomons, in reply, said he did not think that Dr. Smith's proposition to ligate the internal iliac artery would be advisable or useful. He thought the best plan was to separate the placenta and to tie off vessels as each appeared. The severity of the hæmorrhage in the case described in his paper was such as to cause marked constitutional symptoms. The amount of liquor amnii was small.

TWO CASES OF INTESTINAL HÆMORRHAGE IN THE NEW-BORN.

Dr. Mabel Crawford described two cases of the above. Her paper will be found on p. 283.

Dr. Hastings Tweedy said that infantile hæmorrhages were almost always due to duodenal ulcer, and Dr. Crawford's suggestion as to the ætiology was of interest. Against her theory, however, it might be urged that digestive juices were not present in a newly born infant's stomach, nor were they found there for many hours or days after birth. This argument could no doubt be countered by a suggestion of precocity in the formation of the gastric ferment. The subject needed much further investigation, but the treatment of the condition by horse serum in large doses seemed up to this to have yielded the most satisfactory results.

Dr. Trevor Smith said that he did not think the dose of adrenalin mentioned by Dr. Crawford sufficient. He wished to know if calcium chloride was given to either patient. He had a case of the kind a few years ago, and upon the administration of the latter drug the hæmorrhage ceased.

Dr. Solomons asked whether there had been difficulty in labour in either of the cases, as

dystocia was a common cause of melæna. He considered that hæmorrhagic stools were caused often by other factors than duodenal ulcer, and that surgical interference in most cases would be futile. Cold applications to the abdomen and the injection of cold water per rectum had been successful in some instances.

Dr. Rowlette referred to intussusception as a cause of intestinal hæmorrhage in the new-born.

The President referred to a case of epistaxis in an infant three days old. The child died three hours after the first bleeding. It was pale and languid. Ecchymosis of the soft palate and fauces were noted, and, although the evident loss of blood was very slight, the case suggested severe internal hæmorrhage. He thought these cases were not all due to one definite cause, such as duodenal ulcer, but that the bleeding might occur from any part of the alimentary mucous membrane.

Dr. Crawford said, in reply, that as to the cause of the ulceration she regarded it as chemical rather than infective, because of the very early formation of the ulcer. The secretion of gastric juice before the third day would certainly be abnormal, but this would account for the rarity of duodenal ulcer. As to treatment, she could not approve of cold applications on account of the general condition of the infant. She had not given calcium chloride. She quoted two other cases which had recovered after treatment with serum.

LONDON DERMATOLOGICAL SOCIETY.

Meeting held Tuesday, March 21st, 1916.

The President, Dr. J. L. Bunch, in the Chair.

The President showed, among others, the following case:—A Belgian man, æt. 43, with a mixed large and small follicular syphilitic eruption on the trunk, of 3 to 4 months' duration; the patient also had an atrophic scarring on the left eye, caused by a shell during the siege of Antwerp: a most successful transplantation had been performed in this region.

Dr. Morgan Dockrell showed a case of idiopathic multiple hæmorrhagic sarcoma which had greatly improved under thyroid extract and streptococcal vaccines; also a case of perforating ulcer in a man æt. 36, who had received nine injections of salvarsan without any appreciable result. The condition was steadily improving under mercurial treatment.

Capt. W. Griffith showed a case of pustular folliculitis affecting the legs and thighs, and which had been treated by Simpson's rays. After eight exposures the condition cleared up, but a few days later there was a pronounced recurrence of the eruption.

Dr. W. Knowsley Sibley showed the following cases:—(1) A girl, æt. 16, who had a rather unusual ulceration on the fronts of both legs, due to sitting before the fire. (2) A case of psoriasis figurata in a recruit. The eruption was particularly well marked on the back, and had been present for six years. (3) A woman, æt. 28, with a chancre on the lower lip, followed by a secondary eruption on the trunk.

Major E. G. French showed a case of strumoderma in a youth, the lesions occurring on the face and neck, and which has been somewhat improved by applications of Simpson's rays.

Capt. C. H. Mills showed a case of syphilis on an old-standing psoriasis; the patient also had a peculiar horny growth on the umbilicus

The President's paper, entitled "Dermatitis due to Hair Dyes," was postponed until the April meeting.

OBITUARY.

DR. JOSEPH BARNICOT, B.A., M.D., M.R.C.S., L.R.C.P., HITCHIN.

The death is announced of Dr. Joseph Barnicot, of Hitchin, Hertfordshire, from typhoid fever, on March 10. Born in 1875, he was educated at Marlborough, Pembroke College, Cambridge, and St. Thomas's Hospital, while he also studied at the Rotunda Hospital, Dublin, but after obtaining his B.A. degree at Cambridge in 1896 he spent some time in travelling abroad. In 1902 he took the M.B., B.C. degree at the University of Cambridge, and also the M.R.C.S., L.R.C.P., while directly after qualifying he was appointed assistant house surgeon at the Huddersfield Infirmary, and subsequently held the senior post. In 1905 he took the M.D. degree at Cambridge, reading for the purpose an excellent thesis on the Iodine Reaction in the Leucocytes, which work was carried out at Cambridge and in the pathological department at St. Thomas's Hospital. In 1906 he set up in practice at Hitchin. There he had built up an excellent practice at the time of his death. He was twice married, and had by his first wife one son, and by his second wife two daughters.

DR. ANDREW S. WALKER, M.A., M.D.Edin.

Dr. Andrew Scott Walker, of Ordsall Rectory, Retford, died on Sunday at a nursing home in London. The deceased had been in indifferent health for a long time, but his death was rather sudden. He married a sister of Mr. C. W. Keyser, of Eaton Hall, Retford, and went into the Retford district about twenty-four years ago.

Deceased, who was fifty-one years of age, was formerly a well-known medical practitioner in Sheffield. His health broke down some years ago, and he had to give up his Sheffield practice.

Dr. Walker was a native of Bliebo Craigs, near Cupar, Fifeshire. He received his medical education at Edinburgh University, and qualified M.B., C.M., in 1892, and M.D. (Gold Medal) in 1895. He held there successively the appointments of house surgeon at the Royal Maternity Hospital, Physician at the Women's Dispensary, Assistant-Physician for Diseases of Women at the Livingstone Memorial Dispensary, and Assistant-Physician of the out-patient department at the Edinburgh Royal Infirmary. His first practice was in Sheffield, to which city he removed in 1894.

DR. LEON LABBE, PARIS.

Dr. Leon Labbe, member of the Academy of Medicine and the Academy of Sciences, and Senator for the Orne, died on March 21 at the age of eighty-three. Dr. Labbé was one of the masters of French medical science. He was made Commander of the Legion of Honour in 1891.

DR. J. H. NAYLOR, L.R.C.P.Edin., M.R.C.S.Eng.

Dr. John Holliday Naylor, who has died at Harrogate, in his 55th year, was a well-known practitioner in Leeds for about 30 years. About two years ago his health broke down, and after a winter in Surrey he had lived in retirement at Harrogate. Educated at Leeds, he qualified L.R.C.P.Edin. and M.R.C.S.Eng. in 1883. After acting as house surgeon at Leeds Infirmary, and at Clayton Hospital, Wakefield, he conducted a large practice in Leeds. He leaves a widow and a young family of one boy and two girls.

Mr. William James Mallett, M.R.C.S., L.S.A., of Oxford Road, Manchester, consulting surgeon to the Chorlton-on-Medlock Dispensary, left estate of the gross value of £10,760, of which £10,336 is net personalty.

Colonel Ernest Octavius Wight, R.A.M.C., Assistant Director of Medical Services in Flanders, left unsettled estate of £1,953.

SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

Specially compiled for THE MEDICAL PRESS AND CIRCULAR.

High Degrees of Heat versus Low Degrees as Palliative Treatment of Advanced Carcinoma Uteri.—Boldt (*Amer. Jnl. Obs.*, lxxiii., 1) compares the results from the two methods, and reports a fatal case upon which an autopsy was made, and the effects of the treatment examined. The palliative cautery treatment was done with low heat applied for two hours. Two months later the cauterised surface felt smooth, but the tumour mass was larger than before operation; a second application was made with low heat for two and a half hours. The patient died of sepsis on the eighth day. *Post mortem* it was found possible to pass the finger from the vagina into the bladder, and from the bladder into the uterus and directly into the peritoneal cavity. Microscopically, the destruction of the cancer cells was practically limited to the necrosed zone, thus showing that the belief that low heat over a long period extends for any considerable distance is erroneous, and the effect upon the cancer cells was little, if anything more than upon the normal parenchyma. The author says he has not seen a single instance of cure following cauterisation. The only valid objection to high degrees of heat is the smoke and odour, but the operation can be effected in twenty minutes. The method of application of high heat is described. A dull heat is used at first, until a layer of carbonisation is formed, and then the electrode is raised to a light red. The application is controlled by a hand of an assistant in the abdomen. The suggestion to tie the internal iliac arteries before cauterisation is thought good. With cooling specula no damage can be done to the vagina or urethra. It takes about two weeks for the eschar to be thrown off, and then a short application of low heat for twenty minutes is thought good to stop any possible bleeding. F.

Contraction Ring Dystocia.—Harpar (*Amer. Jnl. Obs.*, lxxiii., 1) considers this condition a definite entity, and from the study of ten cases thinks that premature rupture of the membranes, irritating intra-uterine manipulation, and oxytoxic agents may be causes that may occur in a normally innervated uterus. Persistent recession of the presenting part occurred in four cases due to the contraction ring. It is pointed out how the retraction ring, being either in front of the presenting part or the shoulders, must by contracting push the part upwards unless the contractions of the fundus are sufficient to force the part through the ring, in which case the dystocia would be overcome. The diagnosis depends upon examination, the only symptom being obstruction, and treatment should be conservative delivery. F.

Toxæmia of Pregnancy.—Moulden (*Amer. Jnl. Obs.*, lxxiii., 1), in the study of 100 pregnancies in private practice, concludes that 95 per cent. gave a history of fæcal stasis, even judged by the opinion of the laity. On first examination the colon was nearly always full. Morning sickness was present in practically all cases, with the exception of five patients, who had been previously instructed to keep the bowels regular, and as a rule it improved or disappeared when proper colon evacuation was established. About 25 cases showed albumin in the urine at some time. Fæcal stasis may be looked upon as a common condition in all pregnancies, and since the excretory functions are called upon to excrete fœtal waste products in addition to those of the ordinary non-pregnant state, many women who are well at other times may suffer from the retention during pregnancy. The one point common to all toxæmias is auto-toxæmia from fæcal stasis, and when it is recognised that fæcal stasis is common amongst women it is not surprising that some organ or system sometimes gives way when the fœtal excretion is superadded. A classification of toxæmia should begin with headache, irritability, malaise, and all the other minor ailments of pregnancy at the beginning as the most common forms, and ending, with the severe toxæmias, such as eclampsia, but all being of the same type, and largely due, primarily in any case, to fæcal stasis. F.

Value of Pituitary Extract in Obstetrics and Gynæcology.—Bandler (*Amer. Jnl. Obs.*, lxxiii., 1), in a eulogistic paper, holds up pituitary extract as probably the most effective drug introduced into the practice of midwifery, and advocates its use in almost every condition which has been looked upon up to the present as unsuitable, but he strongly urges that the proper dose is not an ampoule merely because the drug is supplied thus. He prefers a third of an ampoule repeated every half hour, if the first stage progresses too slowly, with membranes unruptured and cervix not dilating fast enough, or when the head is fixed and well moulded and through the brim, but the cervix is not dilated at all. Dry labour has not been considered a complete contra-indication in the first stage. When patients complain of pains, and they are probably false labour pains, pituitary extract will have the effect of establishing regular good pains. In induction of labour, after the bag has been introduced and the patient feels only indefinite discomfort, pituitary extract will, in small repeated doses, establish regular labour in a very much shorter time. Chloroform inhibits the drug, but can be used with advantage. It is also advised before Cæsarean section, in menorrhagia, and post-operative intestinal paresis. It does not act in the same way in all patients, and therefore the individual must be studied. F.

Injuries to Nerves.—Billington (*Birmingham Med. Review*, January, 1916) points out the great difficulty often met in determining accurately the nature of the injury done to a nerve by a gunshot wound. The efficiency of the treatment, and the ultimate result to the patient, however, depend to a great extent on the accuracy of the diagnosis. He recommends that a systematic investigation of the patient should proceed as follows:—Obtain an accurate history of the conditions under which the wound was received and its immediate effects. Carefully and methodically examine the distribution of the paralysis, motor and sensory, to determine whether it corresponds with the anatomical distribution of one or more nerves or a portion of a plexus, or whether it presents the phenomena of hysteria. Careful charts of sensory loss are more helpful than the presence of complete muscular paralysis and reaction of degeneration. The information given by electrical investigation is valuable but not wholly trustworthy. Patient investigation over a period of some weeks may be necessary to arrive at a correct diagnosis, but there is no certain evidence that reasonable delay militates in any way against operative success. Billington believes that an operation should never be undertaken until the wound is firmly healed. Sepsis is a complete bar to success. K.

Eye Strain.—Bray (*New York Med. Jnl.*, January 29th, 1916) discussing the connection between many gastro-intestinal symptoms and eye strain points out that failure of the ophthalmologist to give immediate relief to the patient must not be considered as conclusive proof that the symptoms are not due to eye strain. Refraction, it is true, is an absolute science,

applied refraction, however, or how to refract, is an art. In the application of the science of refraction as a therapeutic element difficulties arise. Great judgment and care are required on the part of the ophthalmologist, and this must be assisted by the intelligence of the patient. Bray further points out that it is often the minor astigmatic errors that produce the most annoying symptoms. K.

Treatment of Leprosy.—Heiser (*New York Med. Jnl.*, February 12th, 1916) records his experience in the Philippines of the treatment of leprosy by the hypodermic injection of chaulmoogra oil. It was found that the crude oil was more efficacious than the refined oil, but difficulty was experienced in getting the oil absorbed when it was injected hypodermically. This difficulty was overcome by mixing the oil with camphor. The preparation used was as follows:—

Chaulmoogra oil, 60 cc.
Camphorated oil, 60 cc.
Resorcin, 4 grams.

Mix and dissolve with the aid of heat on a water bath and then filter. The injections are usually made at weekly intervals in ascending doses. The initial dose is one c.c., and this is increased to the point of tolerance. Much difference exists as to the amount of the mixture which patients are able to take. In some a few cubic centimetres produce marked reactions in the lesions, accompanied by fever and cardiac distress. The object sought is to regulate the dose to prevent reactions of too violent a character. When Heiser left the Philippines in March, 1915, there were some 200 patients showing noticeable improvement. A statistical summary of the first series of nine cases gives the following results. Apparent cures, 11.11 per cent.; apparent clinical recoveries, 44.44 per cent.; showing marked improvement, 33.33 per cent.; showing only slight evidence of improvement, 11.11 per cent. Heiser draws the following conclusions from his experience:—The present stage of the development of the treatment does not warrant a claim that anything like a specific for leprosy has been found, but experience shows that chaulmoogra oil gives more consistently favourable results than any other treatment that has come to his attention, and holds out the hope that further improvement may be brought about. It produces apparent cures in some cases, causes great improvement in many others, and arrests the progress of the disease in almost every instance. The treatment is apparently equally efficacious in all forms of the disease, that is, the tubercular, or hypertrophic, the anæsthetic, and the mixed. K.

SPECIAL REPORTS.

NEW ADVISORY COMMITTEE ON DOCTORS' WAR SERVICE.

It is announced that the Royal College of Surgeons has joined the Royal College of Physicians in forming an Advisory Committee to assist the medical authorities at the War Office in their task of securing and selecting doctors.

The new Advisory Committee will work through the Central Medical War Committee, and will deal with:—

(1) Any case affecting the several metropolitan hospitals and medical schools during the war in respect of medical men on their staffs, including residential and teaching staffs—*i.e.*, any case with regard to whom the question arises as to whether he is indispensable or would suffer excessive personal hardship if required to enter military service.

(2) The case of any other medical man in England or Wales in respect of whom the Central Tribunal under the Military Service Act, 1916, or the Central Medical War Committtee thinks it desirable that the Advisory Committee of the Royal Colleges should be consulted.

The Advisory Committee will, in the first place, institute a survey of the minimum necessities of the several metropolitan hospitals and medical schools in respect of staff, and so will obviate the danger of depletion, while at the same time securing the supply of doctors needed by the Army.

The chief merit of the scheme as now produced is that it gives full weight to professional opinion. It is no hard and fast system of conscription, but a system designed to secure fair treatment and adequate compensation. Doctors will be relieved of the difficulty of deciding whether they should go or stay in civil practice; those who go will have their interests looked after; those who stay will still be afforded full opportunity of serving their country.

MEDICAL NEWS IN BRIEF.

Medical Sickness, Annuity, and Life Assurance Friendly Society.

We have received a copy of the annual report of the above society for the year ending December 31, 1915, which is of a very satisfactory nature. The number of members has increased by seventy. The total of the Sickness and Accident Fund is £170,229 11s. 7d. During the year £19,975 18s. was paid away in sickness and accident benefit. There were 702 sickness and 91 accident claims. Of the latter twenty-four were motoring accidents, and sixteen poisoned wounds. There were seven claims for shrapnel or gunshot wounds received on active service. The Annuity Fund totals £78,609 16s. 6d.; the Life Assurance Fund £21,014 9s. 6d. The total interest received on all funds was £9,786, being at an average net rate of £3 18s. 5d. per cent. The society subscribes annually 100 guineas each to Epsom College and to the Royal Medical Benevolent Fund, and also subscribed ten guineas to the British Dental Association Benevolent Fund. As no agents are employed, and no commission paid on new business, a large amount of money is saved annually, which goes to the benefit of members.

New French Remedy for Syphilis.

At a meeting of the Academy of Sciences, Professor A. Laveran described a new specific for syphilis, the discovery of Dr. Danysz, of the Pasteur Institute, who claims that it is by far the most effective yet found.

The remedy is a preparation based upon a mixture of arsenic, antimony, and silver, which the discoverer has named "102," or "Margol." It is alleged to be twice as powerful as Ehrlich's "606," and quite harmless. Drs. Dalimier, Levy, and Franckel, who tested Margol, declare that they obtained remarkable results in even far advanced stages of the disease.

Germany's Falling Birth Rate.

Official returns have now been issued of births and deaths in Prussia in 1914. The figures are very remarkable, and, as the population of Prussia is roughly two-thirds of the population of the Empire, the Prussian statistics are always a pretty safe guide. The number of births was in 1914 1,202,528, as compared with 1,209,500 in 1913, and the number of deaths was 802,776 as compared with 656,490, so that the excess of births over deaths was 399,752, as compared with 553,010. The number of marriages fell from 323,709 in 1913 to 286,197 in 1914. Between 1904 and 1913, the excess of births over deaths fell from 562,508 to 399,752. In these ten years there was a reduction of the birth rate by about 20 per cent. and a reduction of the death rate by only six per cent.

Scottish Hospital for Limbless Heroes.

A Hospital for Scottish limbless sailors and soldiers is to be opened in Glasgow, the military authorities having officially approved of the movement. Lord Provost Dunlop has already received generous financial support, the donations including two of £1,000 each.

Insurance Doctor and another's Panel Patient.

A COURT of Inquiry appointed by the National Insurance Commissioners, and comprising Mr. J. F. Williams (chairman), Mr. C. E. S. Flemming, M.R.C.S., L.R.C.P., and Mr. J. P. Williams-Freeman, M.D., M.R.C.S., sat at the Castle of Exeter yesterday to hear a complaint that Dr. J. H. Clements, a panel doctor at Winkleigh, issued medical certificates on Form 40 to John Fry, jun., North Tawton, the patient of another panel doctor (Dr. Langdon, now of the R.A.M.C., but formerly of North Tawton).

Mr. J. Radcliffe, barrister, appeared for the Devon County Local Medical Committee, and said the complaint arose out of the finding of the local Medical Committee, who passed a resolution declaring that what Dr. Clements had done was detrimental to the medical service, and suggesting that his name should be removed from the panel.

The main facts, supported by evidence, were not in dispute.

Dr. Clements, in his evidence to the Court, admitted that he issued a certificate to John Fry declaring that he was suffering from asthma and unfit for work. Fry told him he had been Dr. Langdon's patient for some weeks, and asked witness to treat him as a private patient. Witness replied that he did not care about attending him as a paying patient, as it was not his rule to attend insured persons and charge a fee. Witness was willing to give him his services during his present illness if he could not obtain relief from his own doctor. Witness was not charging any fee, and Fry, when he was well, could, if he liked, go back to his panel doctor. He (witness) had a panel of his own of about 400. He added that for months he had been under a cloud, the British Medical Association having cast aspersions on him. A more cruel charge with regard to Fry could not be imagined.

The chairman intimated that the Court would report the case to the Insurance Commissioners.

Balances owing to Panel Doctors.

CONSIDERABLE unrest prevails among Lancashire panel doctors over the balances due to them for 1914 not having been received yet, stated Dr. Oldham, at Monday's meeting of the County Insurance Committe at Preston. He suggested that each doctor should be sent a statement of how he stood with the committee for the period January, 1914, to December, 1915, showing payments made to the doctors and amounts still owing.

Dr. Oldham instanced cases of hardship through not getting the money owing. One doctor on entering the panel had to buy a motor car, engage a chauffeur, and go to other expenditure which left him now £400 in debt. Unless he was paid the money due, he would have to borrow, or be pestered by "duns." In another case, the wife of a doctor now in the R.A.M.C. was under heavy expense in paying a locum, etc. The committee owed them £200, and to pay her way she had to entrench upon her savings. Dr. Oldham urged the committee to try to hurry up the Commissioners to find the money for meeting the debts.

Ultimately, Dr. Oldham accepted the offer to refer the matter to the Finance Committee.

Charing Cross Hospital.

A REPORT showing a highly successful year's working was presented, on March 23rd, to the annual court of the governors of Charing Cross Hospital. Princess Louise (the president) was unable to be present, and the chair was taken by Mr. George Verity, chairman of the hospital, who stated that the accommodation was now 300 beds, which meant that the building was being used to its utmost capacity. The equipment was now second to none. The X-ray department had been brought up to date, and it would bear comparison with any similar hospital department in the world. The old mortgage had been reduced from £85,000 to £50,000. The cost of provisions, coal, gas, etc., was dreadful. They had to remember, however, that 747,000 meals were provided in a year, and he could promise the subscribers that the value was got for every penny of expenditure.

Exactly half the beds, the chairman continued, were available for soldiers and sailors, and the efficiently-organised convalescent service had enabled the beds to be cleared rapidly. In "after care" work it was the boast of the hospital that not one soldier had left who required an artificial limb or employment who had not been provided for. The tuberculosis dispensary was now established, and the attendances had been made at the rate of 2,500 per annum. In that work the hospital were asked to co-operate with the Westminster City Council, but the conditions of the agreement offered would have destroyed the discipline of the hospital. It had therefore been decided not to go on with the agreement, although the work of the dispensary would be continued. That, however, was not likely to prevent the Westminster City Council from entering into competition with the hospitals at a time when everyone was advised to save.

Poplar Hospital.

Mr. J. G. BROODBANK presided at the annual meeting of Governors of the Poplar Hospital. The annual report, which covered the diamond jubilee year of the hospital, said the past year had closed with a record sum to their credit. The income for the year was £19,858, by far the largest ever received except in 1910, when the amount of £20,683 included a legacy of £6,000. In-patients admitted during the year had gone up from 1,570 to 1,642. Out-patients and casualties numbered 41,042, a decrease of 5,557. New out-patients, however, had increased from 3,579 to 4,667, and their attendances numbered 19,728, compared with 16,285. Out-patients and casualties totalled 67,705, the complete total of attendances in all departments being 71,509. In addition to the wounded soldiers admitted as in-patients, 480 had been treated in the casualty and out-patients' departments. The report was adopted; a vote of sympathy was passed with Lady Knutsford on the serious accident to Lord Knutsford, who is chairman of the hospital, and the thanks of the Governors were accorded to Lord Inchcape, who presided at the meeting in the City last December, when the record sum of £7,000 was collected.

Italian Hospital.

IN the absence of the Italian Ambassador, Prince Borghese, of the Italian Embassy, presided, on March 22nd, at the annual meeting of the Italian Hospital in Queen Square, and moved the adoption of the annual report.

Sir Stuart Coats (chairman of the committee), in seconding the motion, said at the commencement of the war they had set aside twenty-five of their fifty beds for sick and wounded soldiers and last October they had, at the request of the War Office, found room for another thirty-five beds, still keeping twenty-five for civilian patients. They had at first received a number of Belgian soldiers, and afterwards many British soldiers; and he was glad to testify to the excellence of their conduct and the gratitude they evinced for the care bestowed upon them. The hospital was a connecting link in the British capital between the two nations, which, happily, were now fighting together as Allies. The Italian Government were using the hospital for the attestation and medical examination of Italian recruits. It was with great pleasure that they had received a Christmas gift from Queen Mary.

Sir Dyce Duckworth, in seconding a vote of thanks to the Italian Government for their annual grant of £100, moved by Cav. Uff. R. Reitmeyer (hon. secretary), paid a high tribute to the administration of the hospital.

Last year the hospital treated 4,494 patients, of whom 721 were in-patients, 265 of these being soldiers. Of the civilian patients, 2,672 were Italian and 1,334 British, the remainder being of various nationalities.

Doctors and the Army.

IN the House of Commons, on March 23rd, Mr. Tennant replying to Sir P. Magnus, said that every

effort was made to employ gentlemen who joined the Royal Army Medical Corps in such a way as to give their individual qualifications every consideration. He must at the same time point out that it was sometimes not practicable to use their services exclusively in one special line of practice, as the need for special work was limited. His information was that these gentlemen willingly gave their attention to work outside their special qualifications when work of that kind was awaiting attention.

Sir P. Magnus also asked whether the Government would consider the advisability of reconstituting the Advisory Board to co-operate with the General Superintendent in the further organisation of the medical service; and, if so; whether he would have regard to the suggestion made by a number of medical men that such a board should include some lay representatives.

Mr. Tennant replied that he took note of the suggestion, but he could not admit that a case had been made out for interfering with the organisation as it at present existed.

Mr. R. McNeill: Is it not the fact that the Advisory Board was in existence when the war broke out, and that the neglect to call it together was without any proper authority?

Mr. Tennant: No, sir. I think my hon. friend is misinformed as to the facts. I gave him a description of what occurred at the outbreak of the war in the debate the other evening. It was quite within the competency of the military authorities to suspend the activities of the Advisory Board as and when they might think proper, but I think it is true that the Board had been sitting up to that time.

Sir P. Magnus asked the Under-Secretary for War whether he could utilise to a greater extent the services, in part-time work at hospitals or in looking after the health of the troops, of resident local practitioners, and so release a proportion of the men who had volunteered for whole-time service abroad, or had been asked to take commissions in the Royal Army Medical Corps.

Mr. Tennant: The policy suggested in the question is already followed. There is now a considerable number of medical practitioners employed in part-time work, and it is anticipated that this number will be largely increased.

Military Position of Dental Students.

Mr. J. Bromley, Dean of Guy's Hospital, applied, at Southwark exemption tribunal, for exemption of fourteen dental students. He said that owing to the decrease in the number of dental surgeons, the hospital had had to close down part of its dental surgery, and to discontinue the treatment of children with malformation of the jaw. Most of the applicants were in their third year, and if they joined the Forces, they would have no chance to do any work in the Army of a dental nature. There was a limited number of dental commissions in the Army, and as the dental treatment of the Army was appalling there was a great outcry. They were hoping that more dental commissions would be granted by the War Office as a result of the present agitation.

All the students were granted six months' extension.

U.S.A. Expenditure.

Statistics prepared by Dr. Charles W. Eliot show that in the United States the yearly drink bill amounted to £440,000,000; tobacco, £240,000,000; non-intoxicating drinks, £24,000,000; patent medicines, £16,000,000; and chewing gum, £2,600,000.

Edinburgh Public Health.

The report for 1915 of Dr. A. Maxwell Williamson, Medical Officer of Health for Edinburgh, contains some interesting statistics concerning the population of the city. The population of the registered area at the Census was 320,769; at June 30 last it was estimated at 328,493. The number of inhabited houses was 73,033, as compared with 72,523 in 1914. The total number of births registered in the city in 1915 was 6,112 giving a birth-rate of 18.6 per 1,000 of the estimated population. After the necessary corrections have been made for transcript births, the number to be allocated to the city is reduced to 5,851, equal to a birth-rate of 17.8 per 1,000—the lowest ever recorded in the city. By way of further comparison, it may be stated that the rate per 1,000 in 1861 was 33.4; in 1871, 34.8, the highest recorded in the last fifty-five years; in 1881, 32.2; in 1891, 28.2; in 1901, 24.9; in 1911, 21.2; in 1914, 20.2. Of the total births last year 8.4 were illegitimate. There were 36 deaths reported last year from military quarters, two from pulmonary phthisis, nine from infectious diseases, and 25 from other causes. Under the heading of infantile mortality, it is stated that 774 deaths took place of infants under one year, or 132 per 1,000 births. The deaths among the population generally from phthisis numbered 372, equal to a death-rate of 1.1 per 1,000, being the same as recorded for 1914. Of the victims 193 were males and 179 females. The total notifications of and deaths from infectious diseases (except phthisis) in 1915 were notifications 3,037, and deaths 230, the latter (case and death-rate) equal to .70 per 1,000 of population, as against .35 for the preceding five years.

University of Durham.—Faculty of Medicine.

The following Candidates have passed the first examination for the degree of Bachelor of Medicine:

Elementary Anatomy and Biology, Chemistry and Physics.—Honours, Second Class: Richard L. Dagger, Robson C. Brown.

Pass List: Tom H. R. Anderson, Neil R. Beattie, Dorothy O. S. Blair, Nân Coxon, Hugh L. Mather, Robert P. Wanless, Philomena R. Whitaker.

Elementary Anatomy.—Mark J. Erdberg, M.Sc., Kun Piu Leung, May Raw, B.Sc., Robert Sanderson, B.Sc.

The following have passed the third examination for the degree of Bachelor of Medicine:—

Materia Medica, Pharmacology and Pharmacy; Public Health, Medical Jurisprudence; Pathology and Elementary Bacteriology.

Percy V. Anderson, Richard V. Brew, Hugh J. Dingle, Donald Henegan, William A. Hewitson, Charles G. Irwin, George M. Kerry, John K. R. Landells, Sadek Abdel Shehid, Iskander Soliman, Harold I. Sterne-Howitt.

Society o Apothecaries of London.

The following candidates having passed the necessary examinations were granted the L.S.A. diploma of the Society, entitling them to practise Medicine, Surgery and Midwifery:—

J. Fox-Russell, H. M. Gray, and R. Milne.

MEDICAL WAR ITEMS.

Lieutenant Neil Murphy Gavin, R.A.M.C., who was killed in France on March 12th, aged 42 years, was formerly a medical missionary at the Irish Mission Hospital, Anand, Bombay, under the Irish Presbyterian Church. At the outbreak of war he offered his services and received a commission in the R.A.M.C. He married Dr. Maud Muriel Stevenson, daughter of the Rev. Dr. Fleming Stevenson and also a missionary at Anand.

With reference to Captain H. B. Cunningham, M.B., whose name appeared in the official list of those wounded in the North of France, and who was at first supposed to be a Belfast surgeon of the same name and initials, this has subsequently been corrected to Captain Hugh Boyd Cunningham, of Sunderland. Captain Hugh Boyd Cunningham is the son of Dr. John Cunningham, of Sunderland. Before the war, Captain Cunningham was in practice in that town as an ophthalmic surgeon, and held the position of honorary surgeon to the Durham County and Sunderland Eye Infirmary. At the outbreak of hostilities he took a commision in the Royal Army Medical Corps, and was attached to the 3rd Northumbrian (County of Durham) Royal Field Artillery, Territorial Force. We learn that the wound is slight, and that Captain Cunningham is now on duty again.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

THE WELLCOME HISTORICAL MEDICAL MUSEUM.

WE are asked to announce that this institution (54A Wigmore Street, Cavendish Square, London, W.) will be closed for cleaning from April 1st to the 30th inclusive.

W. R. (Chester).—The note on the work of the Chester Royal Infirmary for 1915 contained a slight misprint. The statement that the average per head was £73 16s. 5d. should be the average cost per *bed*.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION.

THE Royal National Hospital for Consumption, Ventnor, has received a further gift of £1,000 4½ per cent. war stock from Sir Ernest Cassel, to name a bed in memory of his daughter, Mrs. Ashley.

DR. MORTON.—Lejeune's method of treating burns is to inject subnitrate of bismuth into the unpunctured bullæ, and afterwards to withdraw the fluid by means of the cannula still in position. An antiseptic bandage is then applied over the part, and allowed to remain for several days.

GERMAN PANEL DOCTOR.

THE London Insurance Committee have removed from the panel a doctor of German nationality, who had returned to Germany, leaving a deputy to act for him.

PES ANSERINUS (Birmingham).—We shall be glad to receive the notes of the case for publication, but preferably, we think a longer time—say three months—should be allowed to lapse in order to test the completeness of the cure.

A DOCTOR'S CENTENARIAN DAUGHTER.

MISS FANNY C. PARIS, a resident of Yarmouth, Isle of Wight, has died in her 102nd year. Her father, the late John A. Paris, was a former President of the Royal College of Physicians, London.

Vacancies.

Bootle Borough Hospital.—Junior House Surgeon. Salary £170 per annum, with board, lodging, and laundry. Applications to the Secretary, 71, Oriel Road, Bootle, Lancs.

Leeds Public Dispensary.—Lady Resident Medical Officer. Salary £130 per annum, with board, residence, and laundry. Applications to the Secretary of the Faculty, Public Dispensary, North Street, Leeds.

Putney Hospital (Chester Bequest), Lower Common, Putney, S.W.—Resident Medical Officer. Salary £150 per annum, with rooms, board, and laundry. Applications to the Hon. Secretary, 198 Upper Richmond Road, Putney, S.W.

The Royal Surrey County Hospital, Guildford.—House Surgeon. Salary £150 per annum, with board, residence, and laundry. Applications to the Secretary.

Mater Misericordiæ Hospital, Dublin.—Assistant Surgeon, Assistant Physician, and Assistant to the Ophthalmic Surgeon. Applications to the Secretary of the Medical Board. (See advt.)

Royal Albert Edward Infirmary and Dispensary, Wigan.—Junior House Surgeon. Salary £150 per annum, with board, apartments, and washing. Applications to L. E. Mapei, Acting Secretary.

Appointments.

EASTON, T.H., M.D.Edin., District Medical Officer of the Penistone Union.

FITZGIBBON, MICHAEL, L.R.C.P., Assistant Resident Medical Officer (pro tem.) of the Limerick Lunatic Asylum.

GREY, H. M., M.R.C.S., L.R.C.P., Assistant Medical Officer to the South Infirmary of the St. Pancras Parish.

LIDDELL, R. M., M.B., Ch.B.Edin., Certifying Factory Surgeon for the Wolston District, co. Warwick.

MORRIS, E. G. F., L.R.C.P., M.R.C.S., District Medical Officer of the Eastry Union.

O'CALLAGHAN, J. J., L.R.C.P. and S.Edin., Medical Officer for the Glencreagh Dispensary District, Macroon Union.

WADESON, E. A., M.B., B.C.Cantab., Certifying Factory Surgeon for the Sedbergh District, co. Yorks.

WATSON, S. J., M.B., B.Ch., R.U.I., Certifying Factory Surgeon for the Abercrave District, co. Brecon.

WHITE, S. B., M.B., Ch.B.Oxon., Certifying Factory Surgeon for Lyndhurst District, co. Hants.

Births.

ADAMS.—On December 17th, at Wellington, New Zealand, the wife of G. Basil Doyne Adams, M.D.Oxon., of a son.

BLOOD.—On March 23rd, at 5 Brynland Avenue, Bishopston, Bristol, to Dr. and Mrs. B. N. Blood—a daughter.

GASKELL.—On March 20th, at 23 Ladbroke Grove, W., the wife of John Foster Gaskell, M.D., Capt., R.A.M.C. (T.)—a son.

GIBSON.—On March 18th, at 14 Carlisle Road, Hove, the wife of Charles W. Gibson, M.R.C.S., of a daughter (Betty Dangan).

HARE.—On March 22nd, at the Imperial Nursing Home, Cheltenham, the wife of Capt. Theodore Hare, R.A.M.C. (in France), of a son.

LAMPLOUGH.—On March 25th, at Bredon, Alverstoke, the wife of Wharram H. Lamplough, M.D., temp. R.A.M.C., 31st General Hospital, Port Said, of a daughter.

MILLER.—On March 19th, at 18 Pelham Crescent, the wife of the late Captain Guy Miller, R.A.M.C., 12th Middlesex (killed in action in France on 29th December), of a son.

SHARP.—On March 26th, at Aberfoyle, Feltham Avenue, East Molesey, Surrey, the wife (*née* Hetty, youngest daughter of the late Alban Attwood and of Mrs. Atwood, of Ballarat, Victoria, Australia), of Dr. McGregor Sharp, of 118 London Wall, E.C., of a daughter.

SKRIMPSHIRE.—On March 18th, at Madras, India, the wife (*née* Logan) of Capt. F. Skrimpshire, R.A.M.C., of a daughter.

Marriages.

ASPLEN—O'DONNELL.—On March 15th, at St. Stephen's Church, Cheltenham, William Reginald Ward Asplen, Lieutenant, R.A.M.C., only son of the late W. J. W. Asplen, Foxton, Cambridge, and Mrs Asplen, Kenilworth, to Kate Norah, only daughter of the late Colonel A. C. O'Donnell, Indian Army, and Mrs. O'Donnell, Maryville, Tivoli Road, Cheltenham.

FITZGERALD—HATTON.—On March 21st, R. Desmond FitzGerald, M.B., B.Ch., Captain, Royal Army Medical Corps, son of the late R. A. FitzGerald, of Ailesbury Road, Dublin, to Winifred A. Hatton, eldest daughter of R. J. Hatton, M.I.M.E., M.I.E.E., of Lincoln House, Basil Street, S.W.

O'DONOHOE—EXHAM.—On February 24th, at the Cathedral, Plymouth, Francis Glancy O'Donohoe, R.A.M.C., of Castlerea, co. Roscommon, to Violet Maud, second daughter of the late Colonel Exham, R.A.M.C., and the late Mrs. Exham, of Plymouth.

OWEN—BOND.—On March 20th, at the Pro-Cathedral, Clifton, Ambrose W. Owen, M.D., B.S.Lond., Late Temp. Lieutenant, R.A.M.C., of Porth, Glam., to Beatrice Nina Bond, of Bridgwater, Somerset.

STEVEN—FRASER.—On March 23rd, at St. Andrew's Church, Ealing, J. Fraser Steven, M.A., B.Sc., M.B., D.S.O., Captain, R.A.M.C., second son of the late Roderick and of Mrs. Steven, 43 Lansdowne Crescent, Glasgow, to Gladys, only daughter of the late Major and Mrs. Fraser, Glenurquhart, West Ealing.

TURNER—HORNE.—On March 20th, at St. Saviour's, St. George's Square, by the Revd. Francis Boyd, Frederick Thomas Turner, Captain, R.A.M.C., son of Commander F. S. Turner, R.N., to Mary Elizabeth, daughter of the late Albert Horne.

WHITE—MACKLIN.—On March 1st, at the British Legation, Teheran, Persia, Henry White, M.R.C.S., L.R.C.P., of Yezd, to Alice Martha, eldest daughter of Mr. and Mrs. Alfred Charles Macklin, of Ingleside, Wickham Road, Brockley, Kent.

Deaths.

ATKINSON.—On March 21st, at 2 The Sweep, Clapham Common, S.W., William Atkinson, M.D., aged 62.

BURNAND.—On March 24th, at Durban, Natal, Dr. W. E. Burnand, youngest son of L. W. Burnand, M.A.

FELCE.—On March 20th, at Firlands, Burgess Hill, Sussex, Stamford Felce, M.R.C.P.Edin., M.R.C.S.Eng., late of Elgin Avenue, Paddington, in his 81st year.

HARPER.—On March 24th, at 25 Rosary Gardens, South Kensington, James Harper, M.D., Colonel, R.A.M.C. (T.), aged 58.

HEBBERT.—On March 19th, died of relapsing fever, in Mesopotamia, Robert Francis Hebbert, Captain, I.M.S., aged 33.

MURDOCH.—On March 20th, after a short illness, Dr. Mary Charlotte Murdoch, of 102 Beverley Road, Hull.

PARIS.—On March 20th, at Yarmouth, I.W., Fanny Cresswell, second daughter of the late John Ayrton Paris, M.D., F.R.S., D.C.L., President of the Royal College of Physicians, in her 102nd year.

STOCKER.—On March 19th, at Withington, Glos., James Reginald Stocker, M.B.Lond., M.R.C.S., M.R.C.P., formerly of St. Mary's Hospital, the Children's Hospital, Great Ormond Street, and Guy's Hospital, in his 72nd year.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

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AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

The Big "Reviews."

MEDICAL men have, as a rule, but scant leisure for studying the contents of the larger reviews, but there are at least two of those which are now threatened with the limbo of forgotten things which deserve the attention of every thinking member of the profession. One is the comparatively new quarterly called *The Candid Review*, the other is an old and trusted friend, *The Nineteenth Century and After*. The medical article in the former deals with the past; those in the latter with the future. The contents page of "The Candid Review" contains twenty-two items, amongst which the medical eye is immediately arrested by the simple words, "Lord Lister." All the articles in this review are very well written, but this particular one has a literary flavour of a very precious quality. The story which it tells in its 8½ pages of large, clear print is one of the most typical and yet one of the most pathetic that was ever penned. The opening sentence shows where it is typical: "There is no position so dangerous as that of the heretic, in whatsoever age he lives." The element of pathos is supplied by the peculiarly gentle and Christ-like character of the heretic in this particular case.

Recognition of Genius.

IN 1877 one of the leading London medical weeklies (it was not the MEDICAL PRESS AND CIRCULAR) spoke of Lister as having "lost himself in infatuation . . . by the glorification of an idea which is neither original nor universally accepted," and added with satisfaction that "there is less antiseptic surgery practised in the metropolitan hospitals to-day than there ever was." Unlike many pioneers, Lister fortunately lived long enough to witness the vigorous and abundant fruition of the frail plant which he had discovered, and, in the face of so much neglect, obloquy and derision, had patiently tended with such fortitude and devotion. In another passage the writer of the *Candid* article says "Genius calls to genius as deep to deep. Lorenzo de Medici recognised the genius of Michaelangelo; Paoli that of Napoleon." A further instance is supplied by Dr. Pernet in the short article which we published in our issue of March 15th. Descartes recognised Harvey. And we know that Huxley recognised Lister. The gods have always descried and in some measure saluted one another, but the pigmies never recognise the gods. I have heard one pettifogging mediocrity describe his giant colleague as "Not only a lunatic, but a criminal lunatic." It was doubtless thus that the same breed spoke of Lister.

A Citation.

I MAKE no apology for transcribing the closing paragraph of the article, which in its conception is a fine tribute to one of the greatest of our profession; in its wording it is as convincing as it is restrained, and in its moral as humbling as it is uplifting:—"Lister is a very clear example of the value of a great genius to mankind. He is a clear example, because hospitals and surgery before his system and after its use provide such indisputable evidence. There is no room for argument. The most subtle-tongued lawyer could not make out any case for the pre-Listerian days. As such his life is a valuable study, for it shows the great opposition a heretic is sure to meet with from the average man, even though his truth is immediately demonstrable. It shows also that a profession itself is not the best judge of a great discovery occurring in its midst. The poet Henley, the philosophic scientist Huxley, when they saw Lister and his work in the early days, at once recognised his greatness. Lister's life shows, in brief, that peculiar technical knowledge is not the means most capable of detecting a technical genius; but that he who discovers a great man early and readily must have within himself the elements of greatness, even as Henley and Huxley had them. One great man will recognise another or other great men by an instinct that belongs to great men alone. The mass of men cannot detect genius, even though they are peculiarly trained with the peculiar knowledge that one would think should enable them to do so. Set a thief to catch a thief, and set a genius to catch a genius. One genius will catch others, and, if not other genius, will catch the highest talent. For genius knows the value of things and of men, recognises the truth from the appearance in men and things, and consequently at all times, both in peace and war, is the most valuable asset to a nation."

The Staff of Life.

The Nineteenth Century and After contains two articles of immediate interest to everyone, be he medical or lay, who takes an interest in the question which, though always one of moment, has been elevated by the war into a position of paramount importance, that of infant mortality. One of these, entitled "The Children's Food" is from the pen of Miss Constance Maud, a lady who was at one time an authority on most matters Teutonic, especially Wagnerian music. For some years past she has lived in France and has devoted her powers of observation to the study of the laws and customs of our gallant Allies, and her ready and vigorous pen to the exposition of the many lessons which we may profitably learn from them. The burden of her present song is the startling one that whereas the quality of bread is Governmentally prescribed and severely protected in France, we in this country have no Pure Food Law of any effective description.

Some Horrors.

"THE annual report of the Local Government Board for 1911 . . . . and the report of the Special Departmental Committee on Food Preservatives state that among the adulterants used in the aforesaid list were found boric acid, salicylic acid, benzoic acid, sulphuric acid, formaldehyde, paraffin wax, cotton-seed oil, stearine, tallow, French chalk, ground wood, bones and shells, coal-tar dyes, copper sulphate, clay, nitre, red ochre, tannin, etc.—this list is also endless, and contains some articles which are not printable. . . . The German bakers who so largely monopolised, and under their Anglicised names still continue in many districts to monopolise this important trade in London, would be imprisoned without the option of a fine in their own dear Fatherland did they dare attempt to feed the little Germans with the 'starvation bread' they have for a generation past supplied to the children of the confiding country of their adoption."

Adulterants and Infant Mortality.

THE moral of the article, the excellence and the balance of which is somewhat marred by the fact that, following the unfortunate fashion of so many latter-day women writers, Miss Maud drags in a plea for Woman Suffrage by the heels, is that the "National Association for the Prevention of Infant Mortality and the Welfare of Infancy" fails in an important essential and will continue to fail, so long as it omits from among the planks in its platform one which calls upon the legislature to ensure that pure food and especially pure bread is as rigorously insisted upon in this country as it is in France. Certainly the indictment against the quality which is now supplied is both well drawn and convincing. Miss Maud has done a great public service in calling attention to a matter of supreme importance, which appears to have evaded the vigilance of those who are seeking for means to forestall preventable infant mortality.

A Complex Problem.

THE other article in the *Nineteenth Century and After*, though on much the same subject as that which I have just mentioned, is of a very different quality. It is entitled "Infant Mortality: a Problem of the Land," and is from the very able pen of Dr. W. A. Brend, whose interesting work on the subject of "overlying" I mentioned a few weeks back. In the present article the writer takes a very broad view of his subject. He examines the question very carefully from every possible standpoint, and exposes the futility of dogmatising upon any particular aspect of it. "The causes of infant mortality," he says, "are many and complex, and it is often very difficult to allocate to each its real share in the final result. Study of a large number of reports from Medical Officers of Health brings to light wide differences of opinion as to the relative effects of the principal factors responsible. Defective sanitation, overcrowding, poverty, insufficient pre-natal nutrition, artificial feeding, maternal ignorance, are each in turn claimed to be the most potent influence. The difficulty is increased by the fact that our knowledge of the pathological causes of death is in many cases still very imperfect, for such terms as 'atrophy,' 'debility,' 'marasmus,' and 'convulsions,' under which a large proportion of infant deaths are certified, are little better than cloaks for ignorance."

Health and the Land.

LATER on, on pages 623 and 624, we find the two following paragraphs: "But while there is obscurity as to the precise influences at work, the effect of rural conditions, and even of the conditions in urban areas of some size, provided they are scattered in character and broken by open spaces, stands out with astonishing clearness under all circumstances. Nor is this benign influence limited to infants. The general (standardised) death-rate in 1913 in the county boroughs of England and Wales was 15.6, while in the rural districts it was only 10.7. Among children aged one to two years the death-rate per thousand living at that age was 44 in the county boroughs, but only 20 in the rural districts. At ages two to five years the rates were 10.6 and 5.6 respectively. Practically all diseases are less fatal in rural districts, and the difference is most marked in diseases of the respiratory system and enteritis, conditions which in the aggregate account for nearly one-third of the total deaths in this country.

"The lesson to be learnt from these facts is that the surest way of improving the health of the nation is by increasing the proportion of the rural population, developing the Small Holdings Acts, and extending town-planning schemes. Although we have one of the most productive soils and favourable climates in the world, the proportion of the rural population has been steadily declining, millions of acres have gone out of cultivation, and wide areas have been changed from arable land to pasturage."

A Committee of Public Health.

OF course, all thinking people have long held with Sir Henry Rider Haggard that "back to the land" was a sound as well as a sounding motto, but it has been reserved for Dr. Brend to giving convincing reasons for this faith in rural righteousness, which has become such an easy shibboleth for the opulent. The article deserves to be constituted a "reference" to a committee of public health, to be appointed for the solution of the many sanitary and hygienic problems which the conditions of the war have rendered urgent. The Prime Minister has said that committees are already at work considering various questions. It would be interesting to know if among them there is a Health Committee. The real difficulty confronting those who preach the gospel of "back to the land" is a very human one. It is simply that there is more "life" in the towns. Young people—and old people, for that matter—want to live and not to vegetate, and so long as living in healthy country districts connotes a humdrum vegetable existence, so long will people wickedly prefer the risks of unhealthiness in the towns. SINAPIS.

CURRENT TOPICS.

Health in Munition Factories.

The Health of Munition Workers Committee has prepared for the Minister of Munitions four new Memoranda (Nos. 7—10) dealing respectively with "Industrial Fatigue and its Causes" [Cd. 8213]. "Special Industrial Diseases" [Cd. 8214], "Ventilation and Lighting of Munition Factories and Workshops" [Cd. 8215], and "Sickness and Injury" [Cd. 8216].

In the first of these memoranda the Committee express the hope that the study of industrial fatigue, and the science of management based upon it, which is now being forced into notice by immediate need, may leave lasting results to benefit the industries of the country during succeeding years of peace. The memorandum proceeds:—

"Our national experience in modern industry is longer than that of any other people. It has shown clearly enough that false ideas of economic gain, blind to physiological law, must lead, as they led through the nineteenth century, to vast national loss and suffering. It is certain that unless our industrial life is to be guided in the future by the application of physiological science to the details of its management it cannot hope to maintain its position hereafter among those of its foreign rivals, who already in that respect have gained a present advantage."

Proper attention earlier in the war to the need for weekly rest would, it is stated, have prevented a large part of the diminished capacity that has been allowed to appear, and would have averted much costly and wasteful expenditure upon imperfect work. In very many cases, perhaps in almost all, in which staleness is well marked, or has even advanced to definite sickness, a single "day off," given occasionally at the right time, would have avoided much wasteful reduction of capacity, and in the worst cases the total loss of many days of work.

Dealing with special industrial diseases, the committee mention that operatives employed in the manufacture of tri-nitro-toluol have been found affected with unusual drowsiness, frontal headache, eczema, and loss of appetite. Generally the symptoms are at first slight, but if the exposure be continued the symptoms tend to become more severe, while in a few cases profound jaundice with danger to life has supervened, and even death has resulted. Tetra-chlor-ethane, a non-inflammable liquid, smells in vapour form like chloroform and is a powerful anæsthetic, leading to death. It forms an ingredient of the "dope" varnish applied to aeroplanes. An apparently effective varnish has been found which does not contain the poisonous chemical, though, unfortunately, the supply of its ingredients is at present insufficient to meet the demands.

It is noted that the introduction of new labour and of employees unaccustomed to the process concerned, particularly in conjunction with the need for speed and pressure, overtime and night work, with the consequent fatigue inevitably leads to greater risk of accident.

Good advice is proffered on many points: long hours of work, faulty positions at the bench, excessive muscular strain, too prolonged standing, machinery accidents, condition of the air supply, lighting, manufacture of explosives, and so forth, in the observance of which both operatives and foremen are invited to co-operate, event to the extent of having committees composed of workers to deal with the various matters. It is as sensible a report as it is timely.

Treatment of Cancer by S-Rays.

The equipment of the Glasgow Royal Cancer Hospital has been added to by the installation of the Simpson Curative Rays. Two years ago Mr. Simpson, of Simpson and Oviatt, noticed that the light produced by the electric combustion of certain ores had curative effects on workmen's hands. Exhaustive trials have been made in a number of hospitals with the belief that a new bactericide and curative agency of great power has been discovered for many chronic diseases, such as asthma, catarrh, etc., and that in certain forms of cancer good results have been obtained. There is also reason to believe that the same S-rays stimulate the healing of shrapnel wounds. Mr. W. J. Chrystal, of Auchendennan, presented the apparatus, which is fitted up in one of the wards under the care of Sir George Beatson, who has done so much for the hospital.

The rays differ from the X-Rays and from radium emanations in that they are emitted from an electric arc formed between electrodes made by a special process from a mixture of the ores of certain metals, the chief being a tungstate of iron and manganese known as wolfram.

Cancer, being the terrible malady that it is—baffling all hitherto tried forms of treatment, scientific, mainly quasi-scientific, and otherwise—it is wise to try any means, likely or not. But it would be just as wise to have a central authority to record the results of these experiments to avoid their repetition with disappointed hopes. Here is a splendid chance for the British Medical Association, that can build a committee as the Saltmarket barber shaves his customers—while you wait. But we would advise our readers and their friends not to build on the success of this treatment yet. We have seen so many of them—"our little systems have their day, they have their day and cease to be." It is an unhappy peculiarity of our profession to be prone to go a-worshipping after strange gods: when we discover a truth we are very apt to think it is "the truth, the whole truth, and nothing but the truth." Already that tendency has shown itself: already the S-rays are vaunted as curing, or helping to cure, workmen's hands of pathological conditions, shrapnel wounds, asthma, catarrh, and some kinds of cancer. "Methinks he protests too much." But, by all means, let it be fully and freely tried. Serum, radium, bacteriological, and the other fancy treatments of the gang of original researchers have all been hitherto so barren that experiment of any kind is quite as likely to succeed in this way as in the more priggish forms already fully tried.

Hay-Fever.

The time will soon be here when those of us who weep with the coming of June must consider to what remedy they will have resort this year. If the contemplation of the miseries of others be of any comfort, we may console ourselves with the knowledge that hay fever is more prevalent by far in other climates than ours, and exacts a longer period of subjection from its victims. In parts of the United States it has been estimated that not less than 1 per cent. of the total population is subject to the distressing malady, and strenuous efforts to discover and combat its origin are being made by the American Hay Fever Prevention Association. The hay fever of spring which flourishes in European countries is found to be caused chiefly by the pollen of the flowering grasses. The autumnal type, most prevalent in America, has proved due to the pollen of certain flowering weeds, principally the rag weed. The scientists engaged on this research kept two points well in

mind—first, that the flower at fault must ripen at a time corresponding to the onset of the malady, and, secondly, that the pollen must be light enough and borne in sufficient quantity to be carried long distances by the wind. In the ragweed both of these conditions are fulfilled, and prophylaxis here takes the form of the systematic eradication of the obnoxious weed. In this country we have no such simple means of dealing with the trouble, and until some specific remedy be found we must just put up with the inconvenience of living on a grass-grown isle. Treatment is still experimental. Immunisation by pollen extracts and by serum of horses which have been immunised to pollen, has been tried with varying results; bacterial vaccines, too, have had their chance. In a few cases a combination of these two treatments has been of use. There is a third therapeutic measure which deserves further trial—the administration of calcium chloride. Wilson, of Detroit, reports a series of twenty-six cases treated with this salt in doses of 3 grm. daily, which includes some instances of remarkable cure. Scepticism as to results is unavoidable where the number of infallible remedies reported have been legion, but the subject is one well worth further investigation.

Infantile Mortality in Dundee.

DR. TEMPLEMAN, Medical Officer of Health for Dundee, has issued his annual report on the health of the city, and it is a very astounding report, too. The population of the city was estimated at the middle of 1915 as 177,300. Births registered for the year 3,927, a birth-rate of 22.15 per 1,000; of deaths 3,755, a death-rate of 21.18 per 1,000. The number of infants under one year who died was 821, giving an infantile death-rate of 209 per 1,000 births.

The general death-rate for 1914 was 16.87, as compared with 21.18 in 1915. This great difference is accounted for by, in part, the abnormal death-rate among the infants as noted above [this was due to virulent epidemics of whooping-cough and measles], and in part also by increase of death-rate at the later periods of life, which, the doctors say, "may be due to a diminished recuperative power owing to the severe strain which the nation has suffered owing to the war." The rate of illegitimacy in Dundee fell in 1915. Dare we say that the war-baby has not materialised to any great extent yet anywhere in the United Kingdom?

Regarding the infant death-rate, Dr. Templeman refers to the carelessness and ignorance of mothers in allowing their babies to be in an infected house, as they think it is better for children to get these ailments, like whooping-cough and measles, soon over and done with—like baptism and vaccination. He also speaks highly of the efforts of baby-clinics, which he says are doing splendid work and should be extended. He brings out clearly in the case of diarrhœa what the late Dr. J. B. Russell did for Glasgow in the incidence of tuberculous disease, the effect of bad housing. "There were 132 deaths of infants from diarrhœal diseases. Of these 39 occurred in houses of one room, 72 in houses of two rooms, 15 in houses of three rooms, 2 in houses of four rooms, and none in houses of a larger size."

But it would seem that the resisting power of these children is of a low grade: they are mainly hand-fed, and the means for keeping milk pure are woefully inadequate. More, no artificial food for babies at all approaches the breast-milk of the mothers. Unfortunately, from custom, or social conditions generally, an exceptional number of mothers in Dundee are breadwinners, working in mills and factories, and so their babies (pre-natally ill-nourished for these reasons) have to be artificially fed. This seems to be the crux of the question: mothers should nurse their own children—themselves.

The Drug Habit.

VIEWS recently enunciated by eminent authorities upon the subjects of morphinism and allied addictions are worthy of the closest attention. Bishop, of New York, as a result of observations made by him at the Bellevue Hospital, coupled with information obtained in the consulting room, has come to some striking and suggestive conclusions. It is his opinion that to regard the majority of morphinists as wilful yielders to morbid temperament is fundamentally an error. They are handicapped by an abnormal or deficient physiology—of congenital origin—which causes them to experience exceptional difficulties in life from day to day. He states that in very many cases chance has brought to their knowledge the means by which, initially at all events, they attain the relatively effortless level of their normal fellows. Moreover, in many instances, the subject, by exercise of insight, continues over prolonged intervals, to manipulate doses which just keep him up to par, without exciting any suspicion whatever, or causing grossly untoward results. This if his minus quantity be small and readily satisfied. If the physical equation be difficult, however, and ingravescent, we have the hitherto obstinate degenerate—the morphomaniac. Treatment, consequently, must not be symptomatic *i.e.*, not merely directed against the phenomena of morphinism *per se*—but must seek to remove the physical and physiological aberrations, to compensate for which the drug was first taken. It is conceivable that the principle might be extended eventually to include other addictions. The well-known clinical fact of alcoholism ensuing upon the climacteric in subjects hitherto of the greatest temperance—not to stretch the matter further—certainly lends support to the views thus stated.

Paper Money as an Infectant.

A SCOTCH correspondent writes:—Certain subjects recur in newspapers as regularly as the seasons, and the above is one of them. Others are the big gooseberry, the potato like the face of —— (whoever is our pet devil at the time), the three-winged gull, the hexaped calf, etc. It is time now for someone to "get off" about the daffodil "that comes before the swallow dares," etc., to be followed by "Oh! to be in England now that April's ——," etc. Frankly, that last quotation hits us northerners hard: we are sick here of the killing east wind; we have had it so long. But paper money was our set-off. The greatest danger about paper money that we have encountered is its abounding scarcity. That did not seem to be what the *Manchester Guardian's* representative felt. (I wonder if that paper wants a medical expert.) It was the dirt of them: the pathogenic *materies morbi* on their crinkly, greasy surfaces. And the smell. It is difficult in crowded communities to trace where infection comes from; but we do not remember a case of disease traced to a bank-note. To anyone who fears infection from this source, he might burn the notes, or if that is too radical a method of treatment, he could send them to Scotland and we would take care of them.

Medical Vocation.

A CONTEMPORARY journal, in discussing the reasons which impel most young men to select the profession of medicine, instances chance, choice and destiny, as the three probable predominant factors. The last and, to some extent, the first, are, we

believe, open to question. The power of choice is more evident, and may be regarded as two-fold in aspect—viz., selection by the individual himself upon more or less deliberation, and selection for him by those immediately interested in his prospective career. This latter course, in many cases necessary owing to youthful lack of initiative, is definite in wisdom. We do not imply that the selection of medicine as a profession is arbitrary and overbearing upon the part of seniors. It is more a matter of continuous suggestion, in which the subject acquiesces through sheer apathy. Many a man, born into therapeutics in this fashion, comes to act in a relatively admirable capacity eventually; but never works into the keen mental edge of him who has looked around and selected for himself. The attempt should be made to induce the dormant enthusiasm in the young, and conform to it as far as possible in the selection of a career. It is remarkable that in the face of much mental indifference, or even of distaste, that men should behave so creditably; but it is uneconomic, and a waste of time, that so many should be able to cry with Rosetti:

"Who shall say what is said in me
With all that I might have been dead in me?"

Localised Tetanus.

Dr. Monod recently brought this subject before the Paris Academy of Medicine and showed a case of tetanus localised to the upper limb, with complete recovery. He stated that these cases are perhaps more frequent than is commonly imagined. The "secondary traumatic muscular spasms," described long ago by Follin, belonged most probably to the same variety of cases, only Follin considered that they presented the same gravity as true tetanus. The treatment applied by Dr. Monod consisted in high doses of chloral and subcutaneous injections of sulphate of magnesia. He used the following solution:—

Sulphate of magnesia, with 7 parts of water, 250 grammes,
Distilled water, 1,000 c.c.,
of which he injected each time 10 c.c. The patient received 32 injections in 13 days, and the author particularly noted the marked calming action of these injections.

"The College of Nursing" and State Registration of Nurses.

The conferences between Mr. Arthur Stanley and the other promoters of the College of Nursing on the one hand, and the supporters of State registration of nurses on the other, have come to a conclusion. We cannot regret that this is so, and that the issue is now knit, since the differences between the two schemes are fundamental and essential. Mr. Stanley's parlour was temptingly furnished, and his invitations to enter it were blandishing and polite, but fortunately the prey has not been caught. The promoters of State registration have now to set themselves to oppose Mr. Stanley's scheme by every means in their power. If they do not succeed, we may give up all hope of State registration, or, on the other hand, we may have to accept a one-sided scheme which will be worse than none. Mr. Stanley proposes to institute a college of nursing, which may or may not proceed in the future to demand State registration. But as Dr. McGregor Robertson pointed out the other day, the question is: Should they have State registration of nurses or State registration of members of the College? Moreover, Mr. Stanley proposes to issue certificates and enrol not only trained nurses, but voluntary aiders, and to others concerned in "all branches of women's work connected with hospitals" other than the practice of medicine. We may expect a hierarchy of certificated persons ranging from the wardmaids and laundresses to the matrons! It is with some interest we note that the council nominated by Mr. Stanley to govern the College of Nursing contains no representative of Ireland and only one of Scotland.

The Midwife.

The midwife, like the class for whom she caters, is always with us. From Philadelphia we learn that fully 40 per cent. of confinements in that area find successful, or unsuccessful, issue in their hands. This is to be deplored, inasmuch as the female obstetrical freelance is largely represented there, and no system of supervision appears to have been yet inaugurated. The English system is criticised as being only partially successful. Reference is made to St. Louis, where a school for midwives has been instituted, which will, however, require an admission standard above the mental level of an average midwife. Moreover, the melancholy conclusion is eventually arrived at that, no matter how a midwife be licensed or supervised, she never attains the mental or manual efficiency of a practising doctor. It is singular that so essentially a process as childbearing should fail in the hands of women. Hence, concludes our Philadelphian authority, let them be eliminated as soon as possible.

PERSONAL.

Mr. Morgan I. Finucane, M.R.C.S., L.R.C.P., Barrister-at-law, has been appointed J.P. for the County of London.

Dr. E. C. Thompson, of Omagh, formerly member of Parliament for Monaghan, has been appointed a Deputy-Lieutenant for the county of Tyrone.

Dr. Malcolm E. Thompson, Boston, Lincs, was at Boston County Court awarded £40 damages for injuries sustained by a collision between his bicycle and a motor car.

Sir Alfred Pearce Gould, F.R.C.S., has been nominated by Lord Reading a member of the governing body of Charterhouse School. The vacancy was caused by the death of Lord Alverstone.

The King of Serbia has conferred the Third Class of the Order of St. Sava upon Lieutenant-Colonel H. E. M. Douglas, V.C., C.M.G., D.S.O., R.A.M.C., Deputy Assistant Director of Medical Services.

The King has been pleased, by the advice of the Privy Council, to nominate Sir Francis Henry Champneys, Bt., M.D., F.R.C.P., M.R.C.S., to be, for a further term of five years, a member of the General Council of Medical Education and Registration of the United Kingdom.

At Keighley much satisfaction is felt at the news of the safety of Dr. Jno. Parton Berry, son of Dr. Jno. Bright Berry, of Keighley. The younger man was senior surgeon on the "Alcantara" when she fought the German raider. Dr. J. P. Berry had four years' surgical experience with the Fleet, and resigned some time before the war, but was called up at the outbreak of hostilities.

Dr. W. J. A. Erskine, who since 1900 has been the deputy medical superintendent at the Nottingham City Asylum, has been appointed medical superintendent of the Isle of Wight Asylum at Newport. Dr. Erskine, who is very popular with the staff at the Nottingham institution, has had great success in training nurses and attendants for the Medico-Psychological examinations. He has written on a number of subjects connected with lunacy.

FRENCH CLINICAL LECTURE

ON

TREATMENT OF ACUTE ARTICULAR RHEUMATISM WITH INTRAVENOUS INJECTIONS OF COLLOIDAL GOLD.

By M. H. GRENET,

Medicin des Hopitaux, Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

PART II.

Technique and Mode of Application.—Injections of colloidal gold may be employed to the exclusion of every other kind of treatment; at the utmost we merely have recourse in addition to wrapping up of the most painful of the affected joints in wadding, or some local applications of methyl salicylate. We have employed blue colloidal gold, obtained by the chemical process, and containing 0.25 milligramme of the metal to 1 c.c. This is the preparation known commercially as *collobiase d'or.**

The administration of the injection should be *intravenous;* intramuscular injections have but little effect.

As regards *dosage*, we advise the physician not to exceed, for the first time, 1 or 1.5 c.c.; especially if the temperature is high, and the patient greatly agitated; as the intensity of the reaction cannot fail to be accompanied with danger. The subsequent injections may then range in amount from 1.5 to 2 c.c.

A single injection suffices in some cases; but in the greater number it will be necessary to administer two, three, or even four. The successive injections should be given after intervals of 24 or 48 hours. If the temperature proceeds to subside regularly after an injection, we may await developments; sometimes definitive apyrexia will be established in the course of three or four days, without repeating the injection; but we should always hold ourselves in readiness to repeat the injection on the slightest indication of reappearance of the fever or articular pains.

When the patient has become completely apyretic, and commences to walk, we must be prepared to deal with the weakness and pains in perhaps one or two articulations. At the commencement of one of our investigations, we were of the opinion that collobiase was then of no further use; so that we proceeded to the administration of aspirin, and submitted the patient to the application of various external medications (sulphur baths, local heating, etc.). But we are now convinced that the injections of gold are useful in this stage also, and that a puncture made every three or four days leads to a fairly rapid absorption of the exudate—which is a specially prominent feature in cases occurring after the age of 35.

If the patient has presented cardiac symptoms at the commencement of the attack, it seems to us to be beneficial to renew the injections, even after the fever has completely subsided; one or two punctures, made in the apyretic period, have indeed, in some of our cases, secured the complete return of the heart to its normal state.

In a case of subacute rheumatism, the action of colloidal gold is, as a general rule, less rapid and less complete; it will be found necessary to administer at least four or five injections, at intervals of some days. But we have, nevertheless, obtained results which seem to us to be still superior to those yielded by the use of salicylates in those always troublesome cases; and, more especially so, as we have always been able to obviate the occurrence of endocarditis.

The course of treatment of rheumatism with colloidal gold is sometimes completed by having recourse to articular puncture. In most cases of the acute type, the hydrarthrosis rapidly disappears under the influence of the injections; but it sometimes persists in one or both knees, provokes the continuation of pain, and undergoes absorption but tardily. If the effusion is copious in quantity, it will be necessary to evacuate it after the subsidence of the fever; in the majority of cases it will not recur; and we then do not hesitate to make the patient leave bed two days after the puncture. When the fluid withdrawn from a joint presents a marked polynuclear reaction, we may fear a relapse; but if the lymphocytosis is approximately pure (and that is what we most frequently meet with some days after the treatment), the probability of relapse is but slight; then the effusion behaves very much like a foreign body, which it is accordingly desirable to remove. On this account we always should, after the subsidence of the fever, puncture any articulations which still remain tense. By this means we hasten the completion of the cure, and also obviate in great measure the appearance of consecutive muscular atrophy.

ACTION OF COLLOIDAL GOLD.

Such are the rules which we believe appropriate for the treatment of acute articular rheumatism. Let us now see how the colloidal gold acts.

(1) *Stage of Reation.*—Fifteen or twenty minutes after the injection, a rigor of great intensity develops and lasts for a quarter of an hour; rapid elevation of temperature, which often rises above 40° (104° F.); abundant sweats. This reaction attains its maximum at the end of one to two hours; it is nearly over at the end of three hours.

(2) *Effect on the Pain.*—The intravenous injection of colloidal gold exercises a very clearly defined analgesic action. The patients usually experience relief some hours after the puncture; they begin to move their limbs, which had previously been completely rigid. Those who had previously been submitted to the salicylate treatment are always the first to affirm the superiority of that with gold. One of our patients, indeed, who was affected with a grave type of rheumatism, and in whose case the fever persisted in spite of three weeks of treatment, was quite relieved from suffering for some days after the puncture had been resorted to; the salicylate treatment had neither relieved the articular pain nor lowered the temperature; and this young man actually felt well, despite the persistence of the fever; and, of his own accord, asked for a repetition of the injection when the pain recurred.

(3) *Effect on the Temperature.*—After one or two—sometimes three—injections, repeated at intervals of three days, the fever subsides, sometimes brusquely, sometimes in course of three or four days. Such is the general rule; but we sometimes meet with rebellious cases, in which the injections have to be repeated up to the number of five or six. Such are, however, but the exception; and it appears, too,

* We are indebted for our own ampullæ of collobiase to obliging kindness of the firm Boulanger, Dausse et Cie.

that the salicylate treatment gives no better result in those cases.

(4) *Action on the Articular Effusion.*—As a rule the effusions undergo rapid absorption; when they persist, puncture should be resorted to, as we have already said.

(5) *Action on the Complications.*—One of the most remarkable results of the gold treatment is the suppression of the cardiac complications. The presentation of some figures in this connection will give precision to our ideas.

We have treated 54 cases of rheumatism with salicylates. In that series we met with 13 examples of cardiopathy, of which 6 were cured (4 cases of endocarditis, 2 of pericarditis). There were 7 cases of organic, definitive cardiac lesion (1 double lesion of the mitral valve, 5 of mitral insufficiency, 1 of apparently pure mitral narrowing).

We have in turn submitted 84 patients to the colloidal gold treatment. In 8 of those cases, it was adopted only late in the course of the disease; and of this number 3 had already developed a valvular lesion, which was fully established at the time of the first injection. Thus there remained a series of 76 patients who received timely treatment with the collobiase; one of these died during the stage of reaction (Obs. XIII.). Among the others, 5 presented, at the time of their entrance into hospital, well defined symptoms of endocarditis in course of evolution. Those were all completely cured in some days. Not one of our cases has ultimately retained the smallest sign of cardiopathy.

Thus, with the salicylate treatment we had 7 cases of definitive valvular lesion remaining among our 54 cases; with the colloidal gold, we had among the series of 76 cases who received timely treatment 1 case of rapidly occurring death, and one of definite cardiopathy.

In one of our cases—a patient who had previously suffered from a number of attacks, and presented a subacute form of the disease—we have seen rheumatic iritis develop after he had already received several injections and appeared to be fully convalescent. We proceeded to carry out local treatment (hot compresses, atropine collyrium) and administered an injection of 2 cc. of collobiase. The improvement was rapid at first; then, as a slight relapse occurred, a second injection was given, and the cure was complete in three days. We have thus received the impression that the colloidal gold in this case distinctly favoured the action of the local treatment.

Two of the cases that we had treated with gold presented spinal symptoms (rigidity of nucha, Kernig's sign); but these yielded at once to lumbar puncture (the cephalo-rachidian fluid was normal).

(6) *Action on the General Course of the Disease.*—The treatment with colloidal gold produces a notable abridgment of the course of the disease, inasmuch as it enables the patient to leave bed sooner, since a grave relapse need not be feared. The fever often subsides in three or four days. But even when the antithermal action has not been so rapidly manifested, and the temperature has not subsided before the end of five or six days, the very important fact remains that we can begin to mobilise the patient very soon—after two days of apyrexia. In this matter we proceed in the following way. During the course of the crisis the patient is retained in bed, and is nourished with milk and eggs. The temperature having subsided, after one day of apyrexia we allow the use of legumes; on the second day, the patient sits up and is allowed to walk a few steps; on the third day (when there is no albuminuria) the alimentation is made nearly quite normal, and we allow the patient to walk about a little in the bedroom. A good many of our patients even make a little promenade outside, and go downstairs at the end of five or six days; a great number enter on the stage of convalescence fifteen days after the commencement of the attack. There has never been a case of prolonged relapse; sometimes, indeed, after leaving bed a little too hastily, a slight elevation of temperature followed, accompanied with some swelling of the knees; but three or four days more in bed and a new injection always proved sufficient to strangulate any such attempt at relapse. Now, everybody knows how necessary it is to be cautious in mobilising rheumatic patients who have been treated with salicylates; also, how frequently, in spite of all such prudence, relapses—many of grave character, too—are prone to occur. In this respect, the treatment with colloidal gold gives very remarkable results indeed.

(7) *Contra-indications of this Treatment.*—Colloidal gold is an active medicament, which requires to be manipulated with a certain degree of caution; of this fact our own fatal case may be taken as proof. When the temperature is very high, and the patient is greatly agitated, we should administer but a feeble dose; we are even of the opinion that, having regard to the intense, even although transitory, congestive phenomena which are produced by the injection, we should abstain from the administration in cases of hyperpyrexia or cerebral disturbance. Such conditions seem, indeed, to us to form the only contra-indications to this treatment. On the other hand, the occurrence of endocarditis at the outset calls for an immediate use of this remedy; when asystolic phenomena are present, the dose administered should be a small one (0.5 to 1 cc.) it is also desirable in some cases to have recourse to a preliminary injection of spartein or of camphorated oil, from the fact that colloidal gold produces an accentuated cardiac erethism, although but of transitory duration.

Comparison with other Methods of Treatment of Rheumatism.

We have already, in the course of the present communication, indicated our reasons for concluding that the treatment of rheumatism with colloidal gold is superior to that with salicylates, so that we need not discuss the question again. We have also communicated our early results to the medical meetings of the physicians attached to the sixth army corps. Almost at the same date, MM. Loeper and Varham published the successes which they had obtained with injections of colloidal sulphur. While admitting that the number of their published observations is but small, it appears to us that we have secured more rapid and constant results from our own use of gold. We have brought two points into prominent relief: the rapidity of convalescence and the suppression of cardiac complications; so that, far from contra-indicating the use of colloidal gold, a case of endocarditis in course of evolution actually demands it. We do not as yet definitely know whether the colloidal sulphur will have the same preventive action in presence of the development of cardiac complications; but we are already satisfied that every appearance testifies to the fact of its having been established in the case of gold.

Besides, it is very possible indeed that the use of other colloidal metals may be followed by a corresponding degree of success. We have tried gold, and have unquestionably found it a superior remedy to any that we had previously employed, and we have proposed to ourselves to carry out corresponding clinical researches with colloidal silver (electrargol, which we employed in one case, gave us no result). It is certain that the colloidal state possesses as great importance in the success of the

therapeutic procedure as the nature of the metallic element itself; we are also equally sure that in the matter of colloidal metals the mode of preparation plays a *role* of considerable importance, and this has been our reason for indicating specially the clinical fact that our own patients have been treated with the preparation known as collobiase of gold.

Action of Colloidal Gold in the various so-called Rheumatic States.

The results which we have hitherto discussed were all obtained in the treatment of purely acute articular rheumatism, and in the subacute forms of the same disease. But we have also employed colloidal gold in the treatment of two cases of *seric* rheumatism (consecutive to injection of anti-tetanic serum), in two cases of blennorrhagic rheumatism, in one case of infectious mono-articular rheumatism of undetermined nature, in one case of rheumatoid purpura, and in one case of arthropathy in a tuberculous patient who was suffering from dysenteriform diarrhœa. In every one of those patients, the injection of gold produced an attenuation of the pain, but did not appear either to abridge or otherwise modify the normal evolution of the disease; the cases of blennorrhagic rheumatism recovered slowly; the infective mono-articular rheumatism ended in a partial ankylosis of the knee-joint; the purpura yielded only to prolonged rest in bed; the arthralgias of the tuberculous patient recurred after a partial subsidence of some days. Accordingly, the collobiase of gold is above all things a remedy of pure rheumatism. It may prove useful in the treatment of pseudo-rheumatic conditions, but only by functioning as an effective analgesic. And by acting in the same way, as an analgesic agent, it has give us satisfactory results as a remedy in two cases of rebellious sciatica.

Conclusions.

Intravenous injections of collobiase of gold, when administered in cases of acute articular rheumatism, produce the following effects:—An analgesic action, which is constant; a fall of temperature which is often quite abrupt (this result is very frequent, but is not quite constant); abbreviation of the duration of the attack, not only as regards a rapid subsidence of the fever, but of otherwise special importance, because, after the lapse of two or three days of apyrexia, we may commence to get the patient out of bed without fear of producing a serious relapse; considerable abbreviation of the period of convalescence; suppression of rheumatic endocarditis. The favourable results of injection of collobiase are specially manifested in the purely acute cases; but they are also displayed in the subacute, although in somewhat less degree.

ORIGINAL PAPERS.

HEXAMINE AS A URINARY ANTISEPTIC.

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A urinary antiseptic may be defined as a drug administered by mouth, with the object of producing an antiseptic action in the urine. Such a drug acts under great disadvantages as compared with antiseptics used in surgical work. The urinary antiseptic passes through two selective organs, the intestines and the kidneys, and for a time circulates in a powerful oxidising agent—the blood—before finally arriving at the seat of bacterial growth in a solution of uncertain concentration.

It is not conceivable that a powerful antiseptic such as is used in antiseptic surgery can be passed through the delicate cellular substance of these organs, and mix with the blood in sufficient concentration to act as an antiseptic, without at the same time causing serious damage to the intestines and kidneys and acting upon the constituents of the blood.

Antiseptics act by their affinity for the protein of the bacteria. In the diseased urinary tract the bacteria are suspended in a protein-rich medium, and the bactericidal substances combine more readily with the protein in the urine than with that of the bacteria. The urinary antiseptic is thus handicapped in its action by a protective covering around the bacteria.

By far the most important urinary antiseptic in use at the present time is hexa-methyline-tetramine. This was originally known under the proprietary name of Urotropin, and is now manufactured in this country under the name of Hexamine. This drug more nearly approaches the ideal urinary antiseptic than any other, for it contains in an innocuous form, which passes unchanged through the intestines and kidneys, a powerful antiseptic which is liberated in the urine.

Hexamine is a condensation product of ammonia and formaldehyde. An aqueous solution (10 per cent), to which a little ammonia has been added to prevent splitting off of formaldehyde, has no antiseptic action in bacterial cultures. The combination does not possess a high degree of stability. Tablets of hexamine which have been exposed to the air for some months show deliquescence, and on dissolving in water the reaction is acid, and free formaldehyde is present in abundance.

Hexamine is frequently prescribed with acid sodium phosphate, and I shall, later, refer to the significance of this combination. For the present I am only concerned with the effect upon the constitution of the drug. In a very short time the solution is found to contain free formaldehyde in large amount. The same is found in all combinations of acids with hexamine, whether in the form of dry, compressed tabloids or as solution. The importance of this is obvious.

Hexamine owes its value as a urinary antiseptic to the fact that the formaldehyde which it contains is embodied in a form which is readily absorbed without damage to the intestines, which causes no change in the blood, and has no deleterious effect on the kidney during excretion. It is only at the seat of infection, namely, the urinary tract, that formaldehyde should be liberated and exercise its effects.

In clinical work it is recognised that Hexamine acts best when given in a large draught of water, between meals, and the complaint is sometimes made by patients who are taking the drug after meals that it gives them indigestion. The "indigestion" is probably due to the acid gastric juice acting on the Hexamine and liberating formaldehyde in the stomach. This is obviated by giving Hexamine between meals, with sufficient fluid to dilute any gastric juice that may be present. In order further to obviate the splitting effect of the gastric juice I have had Hexamine tabloids coated with keratin, and these tabloids (Messrs. Burroughs, Wellcome and Co.) may be used where such splitting in the stomach is suspected.

Hexamine is rapidly absorbed from the intestine, without causing irritation, even in large doses. It circulates in the blood as Hexamine, although it is said that a very small amount of formaldehyde is split off, and can be detected by the more delicate formaldehyde tests. The greater part of the drug is excreted by the kidneys, but it has also been

found in the bile and pancreatic secretion, in the sputum, and in the secretion of the nasal sinuses, and middle ear. It can be detected in the cerebro-spinal fluid obtained by lumbar puncture, and in the synovial fluid. In regard to the antiseptic value of Hexamine, in these alkaline media, I must confess I have very considerable doubt.

In the acid urine in which most of the drug is excreted, the Hexamine is split, and formaldehyde is given off; and to this its antiseptic power is entirely due.

It is now possible to detect by simple tests the presence of free formaldehyde in the urine, and to differentiate this from formaldehyde in combination as Hexamine. The following are the two tests most suitable for clinical use :—

1.—Phloroglucin test. The following solutions are used :—(a) Aqueous solution of phloroglucin (1 per cent.); (b) solution of caustic soda (30 per cent.). A few drops of phloroglucin solution are added to the urine in a test tube, and then 5 drops of caustic soda solution. A bright cherry red colour appears if formaldehyde is present, but no colour if there is only Hexamine in the urine. The test will show the presence of formaldehyde in a dilution of 1 in 50,000 in the urine.

2.—Burnam's modification of Rimini's test. The following three solutions are used :—(a) Phenyl-hydrozine, hydrochloride, 0.5 per cent.; (b) sodium nitroprusside, 5 per cent.; (c) sodium hydrate saturated solution. Three drops of each of the first two solutions are added to the urine, and a few drops of the sodium hydrate solution poured along the side of the test tube. The urine and the sodium hydrate should be warmed to slightly above the body temperature.

If formaldehyde is present, a dark greenish-black cloud passes down through the urine. This rapidly changes to green, and fades through bright green to orange and pale yellow.

This test will detect formaldehyde in urine, in a dilution of 1 in 150,000, but does not show the reaction with Hexamine. According to Burnam, there is an intense dark blue colour, changing to green, in solution of 1 in 20,000 or stronger, and in solution of less strength the first colour is an intense green.

If these tests for formaldehyde are negative, a fresh sample of urine should be boiled, after the addition of a few drops of sulphuric acid. The test is then applied, and if the formaldehyde reaction is now present, the urine has contained urotropin.

The clinical importance of these tests is great. As will be seen subsequently, there are many factors which modify the excretion of Hexamine, and the liberation from it of formaldehyde, and which therefore hamper its antiseptic action. With a simple, easily applied test, the presence or absence of the formaldehyde in the urine can be checked, and the cause for its non-appearance searched for and remedied. Of the two tests, I prefer the Burnam-Rimini. The colour is very striking, and there is no difficulty in deciding as to a positive or negative result. A disadvantage for clinical work is that the solution must be fresh in order to give reliable results. In order to obviate this, Messrs. J. Bell and Croyden supply the solution in ampoules, each containing the proper amount of the drug.

I shall now refer briefly to the excretion of Hexamine in a normal individual. After a dose of 10 or 15 grains of Hexamine, the drug, or formaldehyde can be detected in the urine in about an hour, but it is frequently delayed longer than this, two or even three hours being not unusual in my experience. The excretion is at its maximum during a period of from 4 to 8 hours after administration. After about 12 hours the excretion is still going on in small quantities. I have detected formaldehyde in the urine 17 and even 22½ hours after a single dose of 15 grains of Hexamine. It would thus be possible by taking two doses of 15 grains in 24 hours, and passing water as seldom as possible, to keep the urine in the bladder, continuously mixed with a strong solution of formaldehyde.

In diseases of the bladder in which frequent micturition is a symptom, the period during which the bladder is under the influence of formaldehyde is reduced to 6 or 8 hours, the time during which the drug is being excreted in quantity by the kidneys. In such cases small doses frequently repeated (7 grains every 4 hours) will be more effective in giving a continuous antiseptic action.

The commonly prescribed dose of Hexamine is 5 or 10 grains, taken three times daily. An increase in the dose to 15 or 20 grains, three times daily, will be followed by an increased output of formaldehyde in the urine. It frequently happens that no formaldehyde is produced in the urine when the patient is taking 5 or 10 grains, but there is abundance of formaldehyde with the doses of 15 or 20 grains, or when the formaldehyde reaction is feeble with the smaller doses, it becomes powerful when the dose is doubled or trebled.

According to a rough estimate of Burnam, the administration of 10 grains of Hexamine thrice daily will give a solution of about 1 in 5,000 of formaldehyde in the urine. This may, conditions being favourable, suffice to destroy an infection of the urinary tract. On the other hand, the infection may persist in spite of the continuous antiseptic action.

There is a limit to the increase in dosage, which in some individuals is very quickly reached. Hexamine itself is non-toxic, but the liberation of a high percentage of formaldehyde in the urine gives rise to irritation of the urinary tract. Irritability of the bladder, frequent micturition, and, eventually, strangury may occur. Hæmaturia has been recorded in a fairly large number of cases. These symptoms have been known to follow small doses (2½ grains) in certain individuals, but this idiosyncrasy is fortunately uncommon. Many patients can take 15 or even 20 grains, three times daily, without irritation. On the whole, I am inclined to prescribe larger doses than is customary, and this is especially the case in dealing with an infection of long standing. It is better, I think, to produce a powerful antiseptic action, and do it for a short time, than to be content with a feeble action spread over a long time. The symptoms of an overdose of Hexamine are, after all, not of a very alarming or of a permanent character, and can be quickly controlled by ceasing the administration of the drug and giving an alkaline mixture. Doses of 20 or 25 grains repeated every four or six hours, for 24 or 48 hours, may suffice to cut short an infection which will drag on for weeks or months with the smaller doses. It is a wise precaution before giving these larger doses to ascertain by smaller doses if the patient has any idiosyncrasy in regard to Hexamine.

Certain Conditions which Modify the Action of Hexamine.

1. *Variation in the reaction of the urine.*

(*a*) Drugs which affect the reaction of the urine.

It is necessary, as a preliminary to the consideration of the effect of alkalis and acids upon the action of Hexamine, to refer to the drugs which act on the reaction of the urine, and the influence upon bacterial growth of variations in the reaction of the urine.

The normal acidity of the urine is due to the presence of acid sodium phosphate, and the acidity

varies in different individuals, and at different periods and times of the day, under influences which are well recognised and need not detain us here.

There is seldom any difficulty in reducing the acidity of the urine and giving it a moderately alkaline reaction. The drugs which are commonly used for this purpose are potassium citrate and acetate, and sodium bicarbonate. The latter drug is, in my experience, the most powerful.

It is a much more difficult matter to turn an alkaline urine acid. Mineral acids (hydrochloric, sulphuric, phosphuric) have an extremely slight action. Organic acids (tartaric, acetic, citric and lactic) have a slight but distinct action in increasing the acidity of the urine. Benzoic and boric acids have no influence on the reaction of the urine.

Dr. Robert Hutchison recommended the administration of sodium acid phosphate with the view of increasing the acidity of the urine, and this drug has proved of great value. Ammonium benzoate may render a strongly alkaline ammoniacal urine acid, where other drugs have completely failed.

In practice there are only two drugs which will render a really alkaline urine acid. These are acid sodium phosphate and ammonium benzoate. The former may be given in doses of 30 grains thrice daily, and, if necessary, increased to two or four drachms thrice daily. In the larger doses it may cause diarrhœa. Ammonium benzoate is given in doses of 15 or 20 grains thrice daily.

(*b*) The influence of alkalis and acids on the action of Hexamine.

It has long been recognised that the action of Hexamine is more powerful in an acid than in an alkaline urine. With the recognition that Hexamine acted only by the production of formaldehyde, the question of its efficiency has now turned upon the splitting of Hexamine in an alkaline and in an acid urine. A good deal of discussion has waged around this point, and it was at one time stated that formaldehyde was produced as readily in an alkaline as in an acid medium. The chief difficulty has been the lack of an accurate test which will distinguish free formaldehyde from formaldehyde combined as Hexamine.

The two tests that have already been described clearly distinguish between free and combined formaldehyde, and permit of an accurate statement in regard to the effects of an alkaline and an acid urine, on the dissociation of Hexamine being made.

There are two aspects of the question to be considered. The urine may be normally acid and rendered alkaline by the administration of alkaline medicines, or the urine may be alkaline from bacterial decomposition. Take first a normal individual with a sterile, slightly acid urine. In such an individual a single dose of 15 grains of Hexamine was given, and free formaldehyde appeared in the urine in two hours. Twenty grains of sodium bicarbonate were then administered. Half an hour later the urine had become alkaline, and free formaldehyde was no longer present, although Hexamine was being excreted. Forty grains of acid sodium phosphate were then given, and a further dose of 20 grains two hours later. Three and a half hours later the urine was again acid and free formaldehyde was present in quantity.

In this case, on a single dose of Hexamine the urine was made positive to formaldehyde, negative to formaldehyde, and positive to formaldehyde again by merely changing the reaction of the urine. It will be seen, therefore, that the administration of an alkali, together with Hexamine, will prevent the liberation of formaldehyde and destroy its antiseptic action.

Turning now to the cases where the urine is already alkaline. it is of interest to note that a normal individual who is taking Hexamine regularly may produce formaldehyde at one part of the day, and fail to do so at another. This is due to the varying acidity of the urine. The morning urine is most acid, and in these individuals always shows formaldehyde; but the urine taken after meals during the alkaline tide may show Hexamine, but no free formaldehyde. On adding an acidifying drug, such as ammonium benzoate, formaldehyde is continuously present in the urine.

In cases of phosphaturia, a mild form of which is extremely common, formaldehyde is not liberated, and in such cases sodium acid phosphate, or ammonium benzoate, must be continued with Hexamine before any formaldehyde reaction is obtained.

Cases of alkaline urine, where the alkalinity is due to bacterial decomposition, form a much more important group. In these cases, so long as the urine remains alkaline, no formaldehyde appears in the urine, and therefore no antiseptic action is obtained. The whole question of urinary antisepsis by Hexamine, in these cases, turns upon our ability to render the urine acid. If we are unable to do so, an antiseptic action cannot be obtained with the formaldehyde series of urinary antiseptics.

The degree of acidity necessary for the splitting of urotropin varies somewhat. With litmus paper a faint tinge of red practically always means a negative formaldehyde, and a haze of phosphates has a similar significance. A well-marked red reaction with litmus will usually be definitely positive to the formaldehyde test. When the total acidity is measured more accurately by means of a decinormal soda solution, the point at which the formaldehyde reaction becomes positive varies from 22 $^{N}/_{10}$ to as high as 32 $^{N}/_{10}$.

(*c*) The effect of alkaline urine on bacterial growth.

A source of fallacy in the administration of urinary antiseptics with alkalis was that the alkaline reaction might of itself influence the growth of bacteria. Before the accurate knowledge in regard to the liberation of formaldehyde as the essential factor in the antiseptic action of Hexamine was available, any benefit gained from the alkaline action on bacteria would be ascribed to the effect of the Hexamine, rather than to the alkali. This fallacy no longer remains, for the formaldehyde test is the test of the antiseptic power of the Hexamine and drugs of this series; but a much wider field for investigation is opened by the question as to what effect alkalis, as such, have upon urinary infection.

Where the urine is already alkaline, the administration of alkalis need not be discussed. It is where the urine is acid that some effect might be expected from the administration of alkalis. Cystitis, with an acid urine, is most frequently due to infection in which the bacillus coli communis predominates, or exists in pure culture.

The treatment of urinary infection by the administration of alkalis has been especially used in the pyelitis of childhood; an infection of the renal pelvis with a pure culture of the bacillus coli communis. The alkaline treatment in these cases was introduced, and has been ably advocated by Dr. John Thomson, and is now the settled practice with the great majority of physicians.

Potassium citrate, and potassium acetate, and sodium bicarbonate are the drugs usually given in doses of from 24 to 48 grains, in 24 hours. Under this treatment the urine becomes alkaline either after a few doses or in two or three days. When this has been accomplished the symptoms subside, the temperature falls to normal, the drowsiness and mental oppression vanish, the pain ceases, and the frequent micturition and scalding disappear.

If the alkaline treatment is discontinued, there is a tendency for the temperature to rise again, the symptoms to reappear. Resumption of the alkaline treatment is again followed by disappearance of the symptoms. Eventually, the alkalis may be discontinued altogether, without recurrence of the symptoms.

The remarkable improvement that is observed in these cases has led to the view that the development of the bacillus coli is inhibited, or the growth destroyed by the action of alkalis. Bacteriologists, on the other hand, deny that any disinfectant, or even antiseptic action, is exercised by alkalis, in strengths such as can be developed in the urine. This conflict between clinical and bacteriological work can, however, be explained by following up the clinical history of a case of pyelitis treated with alkalis. It will then be found that after the symptoms have entirely disappeared, and an apparent cure by alkalis been effected, the urine still shows bacilluria. The action of alkalis in pyelitis appears to be a neutralisation of the acid toxæmia produced by the bacillus coli. The cases that are claimed clinically as cures are not cures in the bacteriological sense, for the infection remains; only, the symptoms which were due to the acids, or acid endotoxins, have disappeared.

(*d*) The effect of diluents and dilute urine on the action of Hexamine.

A not unimportant part of the routine treatment of urinary infection consists in the administration of diuretic drugs and waters. The method of inducing an excessive diuresis is either by the use of such drugs as citrate or acetate of potash, spirits of nitrous ether, theocin sodium acetate, or by means of infusions such as parsley tea, or buchu tea, or by large quantities of plain water, or by means of diuretic waters such as Contrexéville water, Vittel water, Wildungen water, and others.

When the drugs render the urine alkaline, their use in combination with the formaldehyde series of urinary antiseptics is on this account to be avoided; but when the action is largely that of diuresis, as in the teas first named, and the diuretic waters, this objection does not hold. With the use of the Burnam-Rimini test, it will be found that in a patient taking Hexamine, whose urine gives a positive formaldehyde reaction, a large tumblerful of Contrexéville, or other diuretic water will make the formaldehyde disappear from the urine, while the resultant diuresis is in progress. An excessive diuresis such as is produced by these waters, so lowers the acidity of the urine that splitting of the Hexamine does not take place. It is necessary, therefore, in dealing with a urinary infection, to choose between the two methods of treatment—namely, (1) powerful diuresis, and (2) antiseptic action by means of the formaldehyde series of urinary antiseptics. They cannot be used concurrently.

In many cases of advanced disease of the kidneys, a somewhat similar condition of the urine prevails, as, for instance, in the late stage of urinary obstruction from enlarged prostate, or other cause, or extensive destruction from bilateral aseptic calculus, or in bilateral hydronephrosis. Urotropin is given in such cases in the simple faith that the excretion of Hexamine, and liberation of formaldehyde, will go on as if the kidneys were healthy.

If we were to judge by experience with other drugs, such as potassium iodide, opium, methylene blue, or indigo carmine, we should at once conclude that this could not be the case. From observations on a number of such cases, I have come to the conclusion that there are two factors which reduce the efficacy of urotropin as a urinary antiseptic, in advanced disease of the kidneys. First, there is diminished excretion of the drug, in a few cases. A larger dose of Hexamine is required before it is excreted in quantity in the urine. Secondly, when Hexamine is well excreted, the condition of the urine in these cases is unfavourable for the liberation of formaldehyde. The urine is copious and neutral, or fairly acid, and it is difficult, and sometimes impossible, to increase its acidity.

(*e*) Idiosyncrasies in regard to the formaldehyde series.

According to Burnam, not more than two patients out of every ten show liberation of formaldehyde in the urine during the administration of Hexamine. L'Esperance found only 50 per cent. of patients produced formaldehyde, and he considered the reaction of the urine of no importance.

In a series of cases (230) I found 34.3 per cent. negative to the formaldehyde test. In the majority of these cases Hexamine was excreted, but did not split; and in practically all these the cause of the non-splitting was the alkalinity of the urine. In not more than five cases was it impossible to explain, on the lines already indicated, the negative result of the formaldehyde test. Three of these did not split in an acid urine, and two did not excrete urotropin at all. Possibly the solutions with which the test was made were not fresh, and reference to this important point has already been made in describing the tests.

Burnam suggests an idiosyncrasy of certain patients to explain the negative formaldehyde reaction in the urine. It is possible that stale test solutions or other chemical peculiarity may be the explanation rather than a vital action, as Burnam suggests.

Application of the foregoing Facts to Clinical Work.

1. The treatment of different types of urinary infection.

(*a*) Acute bacillus coli infection:—Under this term are included a number of distinct clinical types, such as acute pyelitis in the adult and child, and in pregnant women, and acute acid cystitis.

Urinary antiseptics should be laid aside in the acute stage of this infecton. A course of alkalis should be given and pushed until the urine becomes alkaline. The akaline treatment should be continued for three or four days after the temperature has become normal. Examination of the urine may now show that the infection is disappearing, or gone. If it still persists, with a normal temperature, the urine should be rendered acid, and increasing doses of Hexamine given, until the limit of tolerance is reached, and continued until the infection has disappeared.

In acute acid cystitis the use of urinary antiseptics of the formaldehyde group causes an increase in the symptoms, from the contact of the formaldehyde with the intensely sensitive bladder mucous membrane.

The first object that should be aimed at is to soothe the bladder by reducing the acidity of the urine, or rendering it slightly alkaline. It is time enough to commence the urinary antiseptic when the acute symptoms have subsided.

(*b*) Alkaline Cystitis.

It is obvious from what has already been stated that, so long as the urine is alkaline, the formaldehyde series of urinary antiseptics can have no antiseptic action. Treatment should first be directed to rendering the urine acid by the use of acid sodium phosphate and ammonium benzoate. This has the effect of allaying the intense burning pain, and constant desire to micturate, and at the same time renders the urine suitable for the use of the formaldehyde urinary antiseptics. It will be found that boracic acid is a useful antiseptic in these cases,

and, combined with ammonium benzoate, very rapidly changes the character of the urine, and gives relief. When the reaction of the urine has changed to acid, Hexamine should be added to the mixture.

In prescribing for cases of cystitis, far too little attention is paid to the reaction of the urine. Litmus paper should be used as a guide throughout the treatment. The effect on symptoms, of changing the reaction of the urine from acid to alkaline, or from alkaline to acid, in acute cystitis, quite apart from any antiseptic drugs, is sometimes very remarkable.

2. The limits of urinary antiseptics.

The limitations that idiosyncrasy places upon the dosage of urinary antiseptics in certain individuals has already been noted. In infection of the urinary tract the surgeon early comes to recognise two types. In one type the urinary infection is the only abnormal condition present in the urinary organs, apart from some reaction of the mucous membranes. In the second type some other urinary disease is present, such as stone, chronic prostatitis, or urinary obstruction (hydronephrosis, pyohydronephrosis, enlarged prostate, stricture). In the first class of case, the use of urinary antiseptics is frequently sufficient in itself to cure the infection. One type of case in this class is, however, particularly troublesome—namely, pure bacilluria.

It is sometimes possible by gradually increasing the dose of Hexamine, and at the same time providing an acid urine in which it will split, to cause diminution, and eventually disappearance of the bacilli. Prolonged treatment is frequently necessary, and occasionally it is unavailing, and the bacilluria persists in spite of all treatment. The most persistent cases are those in which no inflammatory reaction of the urinary tract is present. When acute exacerbations occur, these are treated in the manner already indicated.

There are other cases in which it is impossible to obtain a sufficiently high acidity of the urine to produce splitting of the Hexamine. In such cases, and in those where a systematic attempt is being made to render the urine acid by means of acidifying drugs, boracic acid is the best antiseptic drug we possess. In all such cases local treatment by antiseptic washes must be systematically used.

The extent of the infection, and its principal form, must first of all be ascertained by means of cystoscopy, and catheterisation of the ureters. When the bladder alone is infected this should be washed, and where pyelitis is present lavage of the renal pelvis may be carried out.

Turning now to the second class of cases, where some definite lesion is present in addition to the urinary infection.

In a patient with enlarged prostate and an undrained pool of infected urine, or an infected renal or vesical stone, or one with chronic prostatitis or stricture, or pyonephrosis, there can be no hope of ever curing the infection by urinary antiseptics alone. It is necessary to remove the residual urine, or the stone, or to relieve the obstruction. When this has been done urinary antiseptics will complete the cure by overcoming the infection.

3. Urinary antiseptics as prophylactic agents.

Urinary antiseptics have so far only been considered in cases where urinary infection is already established. They have, however, a further use as preventive agents against urinary infection, where the urine is still sterile. This prophylactic action should be used not only when an operation upon the urinary organs is proposed, but also before all operations involving interference with the bowel or other pelvic organs.

In all cases where an instrument is to be passed along the urethra, an endeavour should be made to render the urine antiseptic by giving Hexamine in doses of 15 grains, thrice daily, and ascertaining, by means of the tests already described, if formaldehyde is appearing in the urine. Similarly, in all operations upon the urinary tract, formaldehyde should be present in the urine before the operation, and continuously afterwards, until the patient is convalescent.

There is another class of cases that is worthy of closer attention than it has yet received. It is not an uncommon experience that after an operation on the bowel, or rectum, or female pelvic organs, or a pile operation, a urinary infection occurs and persists. In some of these cases the catheter has been passed for post-operative retention, and the onus of carrying the infection is, rightly or wrongly, placed upon the catheter; but in other cases no instrument has been passed, and the infection has either passed through the blood-stream, or by lymphatic infection, through the bladder wall. In such cases a precautionary course of urinary antiseptics, with the full development of the formaldehyde action in the urine, could not fail to exercise a powerful effect in deciding whether the infection would develop or be only a passing bacilluria.

I would advise, therefore, that the urinary tract be prepared by a course of antiseptics, just as the bowel is prepared by aperients before all operations where interference with the bowel or pelvic organs is probable, and that this be made a routine before parturition.

OXYGEN AND CANCER.

By LIONEL CRESSWELL,
Burley-in-Wharfdale.

PART I.

In an essay published by me in "The Nineteenth Century and After," for May, 1914, I submitted a series of observed facts tending to show that oxygen is the actual stimulus of the primary malignantly disposed animal cell towards the evil course that culminates in the disease popularly called cancer. Not, be it observed, the ordinary oxygen of the atmosphere, diluted, as that is, with four times its volume of nitrogen, nor even perhaps ordinary or the relatively quiescent molecular oxygen. But more probably oxygen surface-concentrated, condensed and molecularly disturbed, possessing the enhanced chemical properties of such, and possibly possessing the atomic activities of the nascent state. Also there must be a catalytic agent present, soot, for instance, in the case of chimney sweep's cancer, blood decomposition derivatives, such as hæmosiderin or globin in sarcoma, melanin in melanotic sarcoma and ferments, enzymes or oxidases in other cases. These act as condensers, excitants, and carriers. Further, there must be exposure of the cell protoplasm to the chemically excited oxygen. But the cancerous predisposition must co-exist or few of us would escape cancer for any length of time. Mechanical injury opens the door—as it were, admitting the catalytically accompanied oxygen over the cell threshold to the oxygen-starved protoplasm inside. Hence, finally there must exist a condition of "oxygen-hunger" in some of the cells or tissues or organs or in the whole organism, arising from senile decay, general or partial, due to natural inferiority, or failure to a great extent in the oxygen supplying mechanism of the body.

It was impossible, as I indicated at the time,

to assemble together in the limits of a magazine article all the data leading to and supporting my hypothesis. So I contented myself with pointing out that similar reasoning as to the causation of cancer applies in other remarkable forms, such as "Kangri" or "firebasket" cancer, to which the natives of Kashmir are prone, to the penile cancer found among the Hindoos, and to cancer among workers in gas works, tar and other products of heat decomposition, and to gases of cancer incidental to workers where animal and vegetable decomposition and putrefaction are encountered, to cancer incident to the liquor trades and alcoholism, and, finally, to those cases of "arsenic" cancer which have given pause to the farmers of parasitic and other theories affording no room for an inorganic stimulus.

It is this last class of cancer that I propose to consider more fully in this paper. According to Roger Williams (1) workers in soot, tar, paraffin, arsenic, etc., are specially prone to certain cutaneous cancer; and it has been reported that those employed in particular cobalt and nickel mines are prone to quasi-malignant pulmonary disease. Adami and McCrae (2) also tell us that of occupational cancers the most noted are cancer of the scrotum, which used to be common among chimney sweepers in Great Britain—the multiple epitheliomatous sores that are apt to develop in those engaged in the production of paraffin and coal-tar productions and the frequency of similar epitheliomatas connected with work in arsenic. According to Paris, cancer of the scrotum, due to the action of arsenious acid, occurs in copper and tin-smelters. Rayer reported cancer preceded by dermatitis among the smelters of arsenical ores. Hesse reported cancer of the lungs—described also as lymphosarcoma—as not uncommon among cobalt miners of Schneeberg in Saxony. The dust of smaltite (cobalt-arsenide) received the blame, and the air of the mines was laden with that. In the Prussian town of Reichenstein, where arsenical mining is an important industry, Geiger found some cases of carcinoma of the fingers supervening upon arsenical warts. Many of the inhabitants suffered from arsenical poisoning due to the arsenic containing water. A number of observers—Jonathan Hutchinson among them—have reported the onset of epithelioma in psoriatic patients who have gone through a long course of arsenic. In some cases the epithelioma began in the psoriatic lesions, but in others it was preceded by growths situated usually on the palmar and plantar surfaces, but also elsewhere. In the cases mentioned by Rayer, a preceding inflammation was noted, and where epithelioma begins in a psoriatic lesion, the inflammation will be aggravated by the arsenic, a fact which is known to happen.

In one form or another arsenic is frequently employed or encountered in ordinary daily life or work. All its forms, *except the metallic*, are highly active poisons. Arsenious anhydride, more commonly called white arsenic, arsenious acid or merely arsenic, is used for the preservation of wood, and is occasionally thrown into the holds of vessels in large quantities to prevent vegetable decomposition. In India a solution of arsenic is applied to the walls as wash in order to prevent the attacks of insects. It is used in many other non-official and pharmaceutical preparations, such as weed-killers for garden paths and walks, sheep dips, rat and fly poisons, veterinary medicine, preparations such as Fowler's solution, Clemen's solution, and quack nostrums for external use in cancer. It is found in the white, green, and blue fire dear to the heart of the small celebrant of the anniversary rites of Guy Fawkes. The tasteless "ague drops" formerly used in the malarious districts contained it. Arsenic is used in preserving the skins of animals; one of the compounds for this purpose is known under the name of Becœur's Arsenical Soap. Fellmongers use orpiment and realgar (compounds of arsenic) as depilatories. The pigments called King's Yellow Orpiment, Scheele's Green and Schweinfurt Green are all either composed of it or contain it largely. In many cases arsenic has been discovered where previously there was no suspicion of its presence, notably in beer, the scare and legal proceedings associated with that beverage of some few years back being notorious. Indeed, so frequently is its presence detected that it is possible, as some assert, that it is to be found in everything and everywhere in greater or less amount.

Arsenic is very closely allied to phosphorus in its chemical, pharmacological and therapeutic properties. It occurs in commerce in steel-grey when fresh, afterwards whitish-grey, from formation of a sub-oxide, somewhat iridescent and brittle, crystalline masses, and is obtained by subjecting arsenical pyrites to sublimation in earthen retorts, the arsenic being deposited in suitable receivers on sheet iron. There is an allotropic variety, yellow arsenic, obtained by subliming arsenic in the current of CO_2 in the dark and condensing the vapours on a surface cooled to O°. Yellow arsenic has an onion-like odour, is soluble in carbon-disulphide, which solution, on evaporation, leaves it in rhombohedral dodecanedronsisomorphous, with crystals of white phosphorus. It is rapidly changed with evolution of heat into ordinary amorphous arsenic. *Metallic arsenic is probably not poisonous*, but may be changed by the animal fluids into soluble compounds and then exert toxic effects. Volatilised metallic arsenic is easily transformed in the presence of air into arsenious acid, and is therefore intensely poisonous. Orpiment is a golden-yellow tri-sulphide of arsenic. Realgar is the di-sulphide.

Generally when the term arsenic is used the anhydrous arsenious acid or white arsenic is the substance referred to. It is obtained in commerce on a very large scale from the roasting of arsenical pyrites. As thus derived it is usually in the form of a white cake, the arsenious acid existing in four forms—one amorphous, one vitreous, and two crystalline—the cake being generally opaque externally, whilst in the centre it is transparent. According to Kruger, this change from the crystalline to the amorphous condition is dependent upon the absorption of moisture, no alteration taking place in dry air (3).

The solubility of arsenious acid is often a question involving chemical legal matters of great moment. No precisely definite statement can be made on this point since amorphous and crystalline varieties have very unequal solubilities, and they occur in very different proportions in different samples. Taylor's (4) statement is accepted as approximately correct, namely, that an ounce of cold water dissolves from half a grain to a grain. If boiling water is used, or if the white arsenic be boiled in water, the proportion dissolved

is raised very considerably. Potash and soda readily combine with it to form soluble salts. Among other arsenical compounds is arsine or arseniuretted hydrogen, a colourless inflammable gas of a fœtid alliaceous odour and intensely poisonous. The discoverer of the gas, the chemist, A. F. Gehlen, of Munich, died from its effects in 1815. When preparing the gas he went smelling about the joints of the apparatus for a leak and inhaled some. He was immediately seized with nausea, vomiting and great exhaustion, and died at the end of nine days. Brittan, of Dublin and a professor at Santiago, in Chili, were poisoned in the same way as recently as 1892. Arseniuretted hydrogen destroys the red blood corpuscles and decomposes the oxyhæmoglobin. *The effect on the latter*, as shown by spectrum analysis, *is the same as is observed after the action of ozone*, and of sulphuretted hydrogen, and also in putrid blood, a dark band appearing in the red in the place of that of methæmoglobin.

Effects of Arsenious Acid on Plants.—If the root or stem of a plant is immersed in a solution of arsenious acid, the hue of the leaves soon alters in appearance; the green colour becomes of a whitish or brownish hue and the plant withers, the effect being very similar to that produced by hot water. The toxic action may be traced from below upwards, and analysis will detect minute quantities of arsenic in all portions of the plant. But it is said by one observer that if arsenious acid be mixed with earth and plants grown in such earth they only take up infinitesimal quantities of arsenic. (5).

Effects on Animal Life.—All infusoria and forms of animalcule-life hitherto observed perish rapidly if a minute quantity of arsenious acid is dissolved in the water in which they exist. The common arsenical fly papers exhibit the action of arsenic on ordinary flies. Within a few minutes the flies fall, apparently from paralysis of the wings, and die. Spiders exhibit a similar sudden death. Annelids, birds, etc., all succumb to its effects. Mammals, such as cats, dogs, etc., suffer from symptoms fairly identical with those observed in man, which vary according to the form of the poison—whether solid, vaporous or soluble—according to the condition of bodily health of the person taking it, and according to the manner in which it is introduced into the animal economy. They are also modified by individual peculiarities or organisation and by habit, as, for instance, in the arsenic-eaters of Styria and India (6).

Large doses produce poisonous effects on human beings, *violent inflammation of the stomach and intestines* being the characteristic symptom; death results from paralysis of the heart and of the respiratory centre, consciousness is retained almost to the last. The inflammation of the stomach and intestines presents characters similar to those produced by phosphorus. In rapidly fatal cases gastro-enteritis may be entirely absent, and death takes place simply from paralysis of the nervous centres. *Gastro-enteritis is produced essentially through the agency of the circulation.* If arsenious acid or one of its salts is injected subcutaneously in the back of an animal no corrosive action is perceptible at the puncture. On the other hand, unless the poison produces rapidly fatal paralysis we find after a few hours violent inflammation of the stomach and the whole of the small intestine. In any case when arsenic is brought into contact externally with living tissue it acts as a caustic only after a considerable interval, and it produces its effects on distant parts only after it has been in some way or other absorbed into the system. It possesses no recognisable direct affinity for albumen, and in the words of Buckheim (7) "it is probably only in the organism that it is transformed into a poisonous compound. . . ." That author further observed, "We are at present unable to indicate with any degree of probability the nature of the combination by which the effects of arsenic are produced."

Externally arsenious acid is a powerful caustic when applied to raw surfaces, though it has little action on the unbroken skin. In certain forms of anæmia it increases the number of the red corpuscles and also their hæmoglobin content. Externally arsenious acid has been much used by quack doctors to destroy morbid growths, etc., a paste or solution being applied strong enough to kill the mass of tissue and make it slough out quickly. But many accidents have resulted from the arsenic being absorbed and the patient thereby poisoned. *Metallic arsenic is probably not poisonous*, but as it usually becomes oxidised in the alimentary canal the symptoms of arsenical poisoning follow its use. (8).

"The older view with regard to the essential action of arsenic was that the effects were mainly local, and that death ensued from the corrosive action on the stomach and other tissues, a view which is in its entirety no longer accepted. It is true that arsenic has a corrosive local action, it will raise blisters on the skin, and will inflame the tongue or mucous membranes with which it comes in contact. The curious fact that when arsenic is absorbed from a cutaneous surface or from a wound, the mucous membrane of the stomach inflames, is explained by the absorption of the arsenic into the blood and its separation by the mucous membrane, in its passage exerting an irritant action. Binz has advanced a new and original theory as to the action of arsenious acid; he considers that the protoplasm of the cells of any tissues possesses the power of oxidising arsenious acid to arsenic acid, and this arsenic acid is again, by the same agency, reduced to arsenious acid. In this way by the alternate oxidation and reduction of the arsenious acid the cells are decomposed and a fatty degeneration takes place. Thus arsenic causes fatty changes in the liver, kidney and other cells by a process analogous to the action of phosphorus. T. Araki also considers that both arsenic and phosphorus lessen oxidation, and points out that lactic acid appears in the urine when either of these poisons is taken, such acid being the result of insufficient oxidation." (9).

I found it worth while examining Binz's theory at first hand.

"We (Binz and Schulz) started with the assumption that arsenic, which behaves both as a triad and as a pentad element, could act as a carrier and as a discharger of loosely combined oxygen, just in the same way as the triad and pentad nitrogen; arsenious acid corresponding with NO and arsenic acid with NO_2.

"NO (oxide of nitrogen, nitric oxide) acts as a caustic on animal tissues, combining with oxygen it is converted into the red fumes of the strongly oxidising agent NO_2. Nitric peroxide NO_2 destroys the tissues, as it is decomposed by water and reconverted, in part at least, into NO.

Nitrogen itself takes no direct part in these changes; it is simply and solely the carrier and distributor of the energetic atoms of oyxgen.

"When the nitrogen in the animal tissues discharges or combines with oxygen the tissue undergoes considerable destructive change. Are these same tissues also capable of developing in arsenic this varying absorption and discharge of oxygen? The well-known facts that arsenious acid is a powerful reducing agent, and that arsenic acid is a still more powerful oxidising agent lent a certain probability to the answer being in the affirmative.

"It would occupy us too long if I entered into all the details of the experiments which were made on different parts of the animal body. I will merely state that the tissues were recent, and when necessary were cut into small pieces; they were then placed into the neutral solutions of sodium *arsenite* and *arseniate* and digested at blood heat. The subsequent chemical examination invariably showed that in the presence of living protoplasm arsenious acid was oxidised into arsenic acid and that the latter was also reduced to arsenious acid, but acted in a strongly marked manner as a reducing agent on arsenic acid.

"The mucous membrane of the stomach, the pancreas and the brain have an oxidising power on arsenious acid, the power of those tissues increasing in the order given; they have also a reducing power on arsenic acid, the activity of the tissues being in the reverse order. This reverse order may arise from the As_2O_3, which results in the reduction of the As_2O_5, constantly undergoing re-oxidisation. The same effects are produced by the liver, which appears to possess the highest oxidising power of all the viscera with which we experimented.

"It is only by *living* protoplasm that arsenious acid undergoes oxidation, when thoroughly boiled —that is to say, when dead—protoplasm has no such action.

"Following upon these experiments which were made with organic tissue in a dying state, we had still to prove that changes similar to those described above took place when the two arsenical oxides were brought in contact with the living tissues of living animals."

Binz here recites certain experiments:—"After each experiment it was found by careful chemical analysis, that both oxides of arsenic were present in the intestines, though only one of the oxides had been injected.

"So far we have arrived at the following facts:—

"1. In the animal organism arsenious is converted into arsenic acid, and arsenic acid is likewise converted into arsenious acid.

"2. These two transformations are rapidly produced, both within the body and outside it by means of protoplasmic tissue.

"3. The experiments performed outside the body demonstrate that the viscera which are more particularly affected by arsenic during life are precisely those by which arsenious acid is readily oxidised.

"Arsenic, therefore, must be regarded merely as the carrier of oxygen, the latter being the active agent. This hypothesis, which undoubtedly is opposed to the theories previously advanced as to the action of arsenic, has nothing out of the way or unusual about it. The results of our experiments justify us in saying that there is no reason against assuming that arsenic may probably possess certain qualities the existence of which has been demonstrated in the case of nitrogen.

"The destructive changes which are brought about by oxygen can be clearly demonstrated by another example which is of daily occurrence. Ferric oxide continuously furnishes to organic tissues an atom of oxygen, and is reduced to the form of ferrous oxide. This, however, cannot exist in the presence of air or water, and is almost instantaneously reconverted into ferric oxide. The organic tissues are wasted or consumed by this continuous interchange of oxygen. The timbers of a ship at the spots through which nails have been driven present a half-charred appearance. Spots of rust on linen cause it to rot and fall into holes. Organic substances in the soil are decomposed under the action of ferric oxide. The ferrous oxide lying in the deeper layers of the soil is turned up by the plough and being converted into ferric oxide produces the result above mentioned.

"The following table enables us to compare the changes which nitrogen, iron and arsenic respectively undergo in accordance with the properties described above:—

NO becomes NO_2 and is reconverted into NO.
2FeO ,, Fe_2O_3 ,, ,, ,, 2FeO.
As_2O_3 ,, As_2O ,, ,, ,, As_2O_3.

These several processes differ in regard to each element only by the rapidity with which they take place. With nitrogen the change occurs very quickly, with iron slowly; arsenic occupies an intermediate position. If an ointment or paste containing arsenious acid is applied externally to parts from which the epidermis has been removed, some hours always elapse before any burning sensation is felt. Nitric oxide produces this effect instantaneously.

"We must not omit to mention here the difference in the mode of action of the two oxides of nitrogen and of arsenic. The former produce their destructive effects on the parts to which they are applied; the latter only within the tissues.

"This difference is of no importance as far as we are concerned, and it does not affect the argument, and it has no real existence. We are in fact able to develop the corrosive oxides of nitrogen within the tissues, and we then see how completely the effects resemble those of the arsenical oxides. On this point I would refer you to what I have previously said when discussing the effects of sodium nitrate.

"By further investigations Hugo Schulz and I have confirmed and extended our theory that oxygen is the prime factor by which the effects of arsenic are produced.

"In the first paper which we published on the subject we called attention to the fact that the action of the arsenites on the alkaline mucous membrane of the intestines was stronger than that of the arseniates. We thereby confirmed the statements of previous authors, who maintained that, given the same amount of metallic arsenic, the arseniates were more rapidly poisonous and produced death more quickly in healthy animals than the arseniates. The nature of the effects produced is, as is well known, precisely the same; it is with regard to the rapidity of their action that they differ.

"When arsenious acid is introduced into the

circulation, and thereby passes to the glandular organs in the abdomen or to the central nervous system, it rapidly deoxidises or reduces the protoplasm of these organs, and is itself converted into arsenic acid. The latter is in the capillaries and veins very readily again reduced to arsenious acid and is then capable of repeating its action on the protoplasm as often as it is carried to the latter. The process thus goes on continuously so long as the arsenic remains in the system.

"I may also mention here that such organs as the liver and kidneys, which are more particularly sensitive to the action of arsenic, and which rapidly undergo change in consequence—a point which I myself have demonstrated as regards the liver—absorb and retain a larger quantity of the drug than those which are less sensitive to its effects. This is a further proof of the close affinity which exists between certain cells and arsenic.

"I then proceed to test the effects of asenic by experiments similar to those I described when referring to phosphorus. These experiments confirmed the conclusions drawn from other facts, namely, that arsenic only acts as a caustic when in contact with *Glandular Tissues*, whereas connective tissue is almost unaffected by it.

"The similarity in chemical and toxicological behaviour of the tri-and quinque-valent elements is very remarkable. This group consists of nitrogen, arsenic, phosphorus, antimony, bismuth and vanadium.

"Nitric Oxide (NO) is a strongly reducing agent; Nitric Peroxide (NO_2) is a powerful oxidiser. It is these properties that unquestionably render them so destructive to tissue. The nitrogen takes no direct part in the process; this is entirely dependent on the combined oxygen, which constantly varies in amount, becoming nascent, active, atomic, or whatever other name you like to give it.

"Phosphorus behaves in a similar manner." (Similarly, also, although in varying degree, as Binz shows, antimony, bismuth and vanadium).

(1) "The Natural History of Cancer." W. Roger Williams, F.R.C.S., 1908. P. 355.
(2) "Text Books of Pathology." J. G. Adami, M.A., M.D., F.R.S., and J. McCrae, M.D., M.R.C.P., &c., &c. 1914. P. 402. See also "Occupational Affections of the Skin." By R. Prosser White, M.D., M.R.C.S., &c. 1915.
(3) See generally any of the leading treatises on inorganic chemistry and toxicology, in particular Oswald's "Principles of Inorganic Chemistry (1914)." Smith's "General Inorganic Chemistry" (1907), "Poisons, &c." By A. Wynter Blyth, M.R.C.S., F.I.C., F.C.S., &c., and Meredith Wynter Blyth, B.Sc. (Lond.), F.I.C., F.C.S., &c., &c.
(4) Taylor's "Medical Jurisprudence," any edition.
(5) "Lectures on Pharmacology." Dr. C. Binz, translated by P. W. Latham, M.A., M.D., &c. Vol. II. (1897). New Sydenham Society's Publications.
"Inorganic Plant Poisons and Stimulants." Winifred E. Brenchley, D.Sc., F.L.S. 1914.
(6) "Poisons, &c.," *quo ante.*
(7) "Lehrbuch der Arzneimittellehre."
(8) "Encyc. Brit." 11th Edit. Vol. II. P. 653.
(9) "Poisons, &c.," *quo ante.*
(10) "Lectures on Pharmacology for Practitioners and Students by Dr. C. Binz, Ord. Professor and Geheimer Medicinal Rath, &c. Translated by Peter W. Latham, M.A., M.D., F.R.C.S., Downing Professor (1874—1894), &c.

IT is proposed to establish a course of military medicine in the medical school of Harvard University, under the supervision of Major Weston P. Chamberlain, of the the United States Army.

IT is understood that Germany is purchasing seaweed, for the purpose of making iodine, wherever she can, and the German shores are cleared of seaweed day by day.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE CONSCIENTIOUS OBJECTOR.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Mr. Percy Biggs suggests that I wrote to you on this subject in order to "get a page in your valuable journal . . . to state opinions on the conscientious objector which he considers are incorrect." His perspicacity is continuous. Such was my object, and the result has been to draw from him a statement of his views which shows him to be illogical, confused, or ignorant in psychology, and unpatriotic—illogical, because when he defines the characteristics of his class he rests on the fallacy of the patriotic principle, he begs the question; ignorant of psychology, because he confounds conscience with consciousness; unpatriotic, because he prefers to save himself at the expense of his compatriots who obey the behests of the King, of the chosen leaders of the policy of the country, and of the teaching of the Bible itself. Mr. Biggs's conscience is a non-existent phantom, it is a relic of the old false assumption that there is a special faculty which directs what a man should or should not do, whereas it is clearly shown by modern psychology that there is no such faculty, but that what exists really is a state of consciousness which is not a primary faculty at all, but is the result of the physical processes which the various environmental excitants bring about in the brain. In this case for the consciousness to be a right-minded complex the elements of it must be of the proper kind—viz., obedience to authority, patriotism, unselfishness, courage, and duty to your neighbour. In most of the conscientious these componets are wanting, so that the complex, or the "content of conscientiousness" is useless to the country—it is a selfish consciousness, and if universally held would end in physical annihilation and spiritual degradation. If Mr. Biggs would favour me by reading the chapters on "Consciousness" in my book, "Ex Cathedra Essays," he would, perhaps, have a better conception of the subject. I mention this, not as an advertisement, but charitably to help Mr. Biggs.

I am, Sir, yours truly,
T. CLAYE SHAW, M.D., F.R.C.P.

London, W.
April 2nd, 1916.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The letter of your correspondent Mr. Percy Biggs, in reply to Dr. Claye Shaw, is amusing as an attempt to bolster up what he is pleased to call his conscience. For the conscience of a so-called conscientious objector is only a man-made affair. Certainly religion lends no support to this unstable contention. If he thinks it does he is mistaken, and religion is the highest tribunal to which he can appeal. Is there a word in the New Testament condemnatory of the battles fought against, say, the Amalekites, by the Israelites of old? Was not the extermination of the idolatrous tribes one of the chief duties which the Israelites were called upon to perform? And have not the Huns in this war placed themselves upon the same level as the Amalekites, and do they not deserve the same punishment? But let us go a little further and carry the conscientious objector's attitude to its logical conclusion—to what does it lead? Let us suppose that every man in this country, including

also those manning our fleet and those fighting our battles, "downed tools" because of conscientious objection to warfare, what would become of the nation? We should soon find ourselves a vassal of Germany, and we should merit our punishment by the wilful neglect to exhibit that priceless possession of a nation—patriotism. If a "conscientious objector" can ignore patriotism in the present crisis of his country's need, then he is only fit for a prison camp in Germany. He is certainly not entitled to the advantages gained for him by our forefathers in battles which have entitled us to live as a free nation.

I am, Sir, yours truly,
F.R.C.S.

London.
March 31st, 1916.

To the Editor of The Medical Press and Circular.

Sir,—Dr. T. Claye Shaw has been furnished by Mr. Percy Biggs with a text for amplification of his extremely interesting and suggestive article. The psychology of the conscientious objector will evidently bear further examination, and all your readers will hope to find this examination carried out by Dr. Claye Shaw.

With psychology I do not deal, but from the sociological point of view one might characterise Mr. Biggs's tenets, if they were not so pitiable, as merely grotesquely absurd. These tenets, if carried out to their logical conclusion, would mean the breaking up of civilised society and the substitution of a government of criminal lawlessness. This can be best illustrated by concrete examples. We all recollect the story of the Stepney anarchists. If Mr. Biggs's opinions had been applied in this case the government of London, or even the whole British Empire, might have been left in the hands of these brigands, reinforced by the larger band of their brethren then living in the East End. These men resisted arrest, barricaded themselves in a house, and shot down, wounded, or killed some six or more policemen who ventured to approach. The police, reinforced by soldiers, opened fire in return on the house, and in the end the murderers were either shot down or perished in the fire which later destroyed the building. No doubt it is deplorable to have to commit such justifiable homicide, and it will no doubt be possible to abolish manslaughter of this kind when murderers cease to appear.

Mr. Biggs's creed in operation would mean the abolition of private ownership. How do the Society of Friends, who are mostly well-to-do and wealthy, safeguard their worldly possessions? If, for example, their deeds and securities are deposited with their banker, it is always possible that a conflict with the police and a gang of armed burglars would lead to the slaughter of some of the robbers. A military guard with fixed bayonets and ball cartridges is on duty at the Bank of England every night. It must seem most immoral in Mr. Biggs's opinion to run the risk which an assault upon the Bank by armed robbers might entail. Then the case of the householder. He must be bound to receive, with words of peace, a party of robbers, whether armed or not, who might pay him a visit at night. He must not oppose them himself by force nor call up the police. He ought not, indeed, to pay the police rates. He ought carefully to inculcate to the female part of his household the necessity of not resisting any insult that might be offered by the thieves, and not to seize any available weapon to defend themselves against foul outrage. They might, perhaps, slay their assailant—a heinous crime according to Mr. Biggs's reasoning. It is not worth while labouring this argument further. It is amazing to see that a man who can write so clearly as Mr. Biggs should be capable of putting forth such ideas.

Similar considerations obviously apply to international relations. According to Mr. Biggs, Belgium ought to have prostrated herself before Germany. France ought to have fallen on her knees, and whilst accepting the position of vassal to Germany, should have exchanged German Kultur for the freedom of thought and research which have been the glory of her ancient and modern universities. We, for our part, ought to have welcomed with peaceful cries the Kaiser and his army to our shores, and should have witnessed with abject subjection his coronation as king of these realms, Emperor of India, and Over-Lord of our Dominions and Colonies.

Mr. Biggs's views are not really shared by the Society of Friends. A large number of young Quakers volunteered to the Ambulance Corps at the outbreak of war, and many of them have been wounded or killed while acting as stretcher-bearers at the Front. These brave fellows were not so stupid that they could not see that each of them was setting free a fighting man who, without their help, would have been needed for the duty they had taken on. Everybody who knows much about the Society of Friends is aware that they form but a small community, which is rapidly dwindling. In former times they were kept apart by persecution. The triumph of religious freedom in these islands has formed the main cause of this decay. In time of peace their illogical and unpractical attitude does no harm—many of them lead noble lives of continuous self-sacrifice. But in the stress of war, such as we are now enduring, fantastic theological arguments cannot release responsible citizens from the obligations of serving their country when called upon, and if they will not serve voluntarily, the State has surely the right to compel them.

I am, Sir, yours truly,
A Student of Sociology.

March 31st, 1916.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

To the Editor of The Medical Press and Circular.

Sir,—It will interest your readers to learn that the above Association on St. Patrick's Day presented the Arnott Gold Medal for bravery to Capt. W. Loughman, R.A.M.C., of Dublin, for conspicuous gallantry at the front.

I am, Sir, yours truly,
Shepherd Boyd,
Hon. Prov. Sec.

7 Springfield Avenue,
Harrogate, Yorks.
March 25th, 1916.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

SECTION FOR THE STUDY OF DISEASES IN CHILDREN.

Meeting held March 24th, 1916.

The President, Dr. R. Hutchison, in the Chair.

Dr. Hugh Thursfield showed a case of rickets; multiple fractures, in a girl, æt. 2½, with old fractures of both clavicles, both femora, and both humeri, and recent fractures of right humerus and left fibula and tibia. She had marked rickety deformity of the thorax.

Dr. H. C. CAMERON showed a case of osteogenesis imperfecta in a girl, aged 5 months. Three other children in the family. No history of fractures in any relatives. Born at full time. The baby was small, though not ill-nourished. On admission, there was tetany of the hands, and the spasm could be made very marked by rendering the hand cyanosed by the pressure of an elastic band around the upper arm. In a few days this disappeared. Until admission the baby was breast-fed. The shape of the skull was typical. The antero-posterior axis of the eyeball pointed downwards as a result of changes in the shape of the orbit. The skull presented a superficial resemblance to that of hydrocephalus of mild degree. The limbs were somewhat curved and a little short. A thickening due to callus could be felt in the shaft of the right femur. The sclerotics were somewhat blue.

Dr. J. L. BUNCH showed a case of papulo-necrotic tuberculide. The patient was a boy, æt. 17. The eruption had begun when the child was aged four years, as a single red patch at the navel, on which small red nodules had developed later. The nodules were slightly raised, somewhat papular in character, and distinctly infiltrated. They had a tendency to necrose, and always left a superficial, shallow scar about one-eighth inch to one-third inch in diameter. The disease was evidently still progressive, for, when shown at the meeting there was a well-marked raised red papule on the abdomen which had made its appearance during the past week, such as always went on to the formation of a depressed, atrophic scar. The boy attended school regularly, and was not inferior in physique to other boys of his own age; there were not, and never had been, any signs or symptoms of lung trouble, but occasionally there had been enlarged glands. Since 1906 the disease had continually progressed, always in much the same manner, but more recently definite ulcers had been present on the legs and an unusual form of alopecia had shown itself. Guinea-pig inoculations were positive. All kinds of treatment had been tried: tuberculins of various nature and in various doses, X-rays, and local applications of all kinds.

Dr. J. L. BUNCH also showed a case of molluscum contagiosum. The boy had a number of typical molluscum lesions, but in an unusual position. They were situated in the right groin and were in various stages of evolution. The usual positions—hands and face, etc.—were quite free from lesions.

Dr. BUNCH also showed a case of multiple lupus vulgaris. The patient, a girl, æt. 5, developed 44 patches of lupus vulgaris after measles. The patches were of various sizes and situated on the face, trunk and limbs. The lesions had been scraped and X-rayed in addition to other local treatment in some cases; and were now cured.

Dr. J. D. ROLLESTON showed a case of transient hemiplegia in diphtheria and diphtheritic onychia. The patient, a boy, æt. 5, was admitted to hospital on October 6th, 1915, with severe faucial diphtheria, on the third day of disease. 20,000 units of antitoxin were given on admission, 16,000 on October 7th, and 12,000 on October 8th. The throat became clean on October 11th. An urticarial rash appeared at the injection site on October 12th, and persisted till October 15th. The same day the heart, hitherto normal, showed some left-sided dilatation and an occasional extra-systole, and the child vomited. On October 16th triple rhythm developed and the liver became enlarged. On November 2nd the voice became nasal. In the morning of November 3rd, the thirty-first day of disease, a circinate rash appeared on the limbs. Temperature, 97.8° F. During the day he complained of abdominal pain, and at 10 p.m. became very pale and almost pulseless. At 1.30 a.m. the face, eyes, and arms twitched, and between 4 a.m. and 6.40 a.m. he had general convulsions. At 11.20 a.m. he was found to have complete loss of power in the right upper and lower extremities. He seemed to understand what was said to him, but could not speak. The following morning he had quite recovered his speech and could move his right arm and leg freely. The right plantar reflex was still extensor, but became flexor the next day. The voice remained nasal until November 29th, but no other nervous symptoms developed, and when he was allowed up, on December 3rd, the sixty-first day of disease, he could walk without support. On January 19th, a culture taken from the lesion on the middle finger showed numerous groups of diphtheria bacilli, and 8,000 units of antitoxin were injected. Within a week the lesions, which had been in existence for two and a half months, had completely healed. On his discharge from hospital the left index, ring, and especially the middle finger showed some deformity and ulnar deflection of the terminal phalanges. There was marked limitation of movement of the terminal phalanges of the index and middle fingers, from which nearly all the nail had disappeared.

Dr. E. B. GUNSON showed a case of gangrene of the leg following diphtheria. The patient, a boy, æt. 6, was admitted to hospital on January 5th, 1915, with severe faucial diphtheria on fourth day of disease. He was given 20,000 units of antitoxin on admission, and again on the following day. On the seventeenth day the pulse became markedly irregular, the onset of arrhythmia being followed by a marked increase in cardiac and liver dulness. On the eighteenth day there was a sudden onset of acute pain, referred to the right popliteal space. On the following day a ring of discoloration appeared below the knee and the leg became cold. Gangrene of the right small toe and outer aspect of the foot developed on the twenty-second day, and gradually involved the whole of the leg below the level of the knee-joint. Sloughing of the skin appeared at the line of demarcation on the forty-ninth day. Palatal, pharyngeal and diaphragmatic palsies developed during the fifth and sixth weeks. Amputation of the right leg was performed by Mr. H. S. Clogg, the patient ultimately making a complete recovery.

Dr. C. O. HAWTHORNE showed tracings of a case of rapid respiratory rhythm apart from other evidence of disease. The patient, a girl, æt. 8, was under observation in hospital for some six weeks, and no evidence of organic disease was discovered. The respiratory rate was constantly quickened (60 to 80 per minute), and occasionally exceeded the pulse rate; when the child was asleep, however, it fell to 20 to 25. There were no other symptoms, and save for the rapid breathing the child seemed to be in a normal state of health. When she left the hospital the respiratory rate was about 40 per minute.

Dr. C. O. HAWTHORNE also showed a case of acute nephritis without œdema; recovery. The patient, a girl, æt. 9, was sent into hospital as "probably a case of intestinal obstruction"; the recent history was of constipation with persistent vomiting of forty-eight hours' duration. Physical examination negative, but for several days urine scanty (8 oz. to 10 oz.), with albuminuria (Esbach 3.5) and numerous epithelial, granular and hyaline tube casts; no blood. Early cessation of vomiting and urine normal at the end of a fortnight. No œdema at any time; maximum sphygmometer reading 85 to 90; no evidence of cardiac hypertrophy; brachial arteries palpable, but not in excess of those in other children of same age; and ophthalmoscopic examination negative. No clinical evi-

dence of specific disease, and Wassermann reaction negative.

Dr. E. A. Cockayne showed a case of congenital sclerodermia and sclerodactylia. The patient was a male, æt. 2. First child. Parents healthy. Mother was quite well during pregnancy and has had no miscarriages. The child was born prematurely at the eighth month, and was said to have weighed only 2½ lb. at birth. When first seen at the age of seven months he weighed 9 lb. 4 oz. There was hydrocephalus, the head measurement being 16¼ in. The Wassermann reaction was negative. There were dilated veins over the scalp, which was almost devoid of hair, and the eyebrows and eyelashes were almost entirely absent. The skin of the face was thickened, shiny and atrophic, especially on the ears and alæ nasi. In the lower limbs, the outer aspect of the thighs and the whole of the skin below the knees was thickened. Growth had been very slow, the weight having been 10 lb. 8 oz. in March, 1915, 11 lb. 2 oz. in August, 1915, and 11 lb. 8 oz. in February, 1916. There was persistent conjunctivitis, and during last summer there was inflammation of the cornea, with subsequent formation of nebulæ. Nystagmus is now present. Treatment, first with mercury and then with thyroid extract, was carried out for some months without appreciable effect.

Dr. E. A. Cockayne also showed a case of paroxysmal hæmoglobinuria. The patient, a boy, æt. 7, lived in India until March, 1915, where he suffered slightly from malaria. There was a history of a miscarriage before he was born, and of a still-born premature child two years ago. The first attack of hæmoglobinuria occurred the day after landing in England. He was free in the summer, but in the autumn, with the onset of cold weather, attacks had occurred fairly often. Previous to the attack the ears and feet felt very cold, but there were no definite phenomena of Raynaud's disease. The child was thin, red-haired, and very anæmic. No definite stigmata of congenital syphilis. The urine during an attack was coffee-coloured and contained hæmoglobin and methæmoglobin, but no red corpuscles and no casts. Wassermann reaction strongly positive.

Dr. J. D. Rolleston showed a brain of a mongolian imbecile. The patient was a female infant, aged 12 months, the youngest of eight children, who died of severe faucial and laryngeal diphtheria, complicated with broncho-pneumonia. The brain of a normal infant of the same age who also died of faucial and laryngeal diphtheria, complicated by broncho-pneumonia, was exhibited to show more clearly the following features of a mongol's brain :—

(1) Reduction of the antero-posterior diameter. The brain, as a whole, was short and oval.

(2) The large and flat character of the convolutions.

(3) The shallowness of the secondary sulci.

(4) The deficient vascularity.

(5) The small size of the pons, medulla, and cerebellum.

The brain, as a whole, was a good size for an imbecile's brain. Its weight was 836.32 grm., as compared with 816 grm.—the normal weight of a female infant aged 1 year. There was no obvious asymmetry nor any localised macroscopic lesion.

Dr. H. C. Cameron showed a skeleton from a case of osteogenesis imperfecta, aged 2 months. The birth had been premature and the deformities had been noticed from the first. The frontal suture was persistent and widely separated. The anterior, posterior and lateral fontanelles were all widely patent. The bones of the skull were very thin. The orbits were oval and the long axis vertical. In the temporal region the walls of the cranium were formed almost entirely of membrane, and the position of this membranous area corresponded with that of the bulging above the ear which was so marked a feature later in life. Almost every rib was fractured once, and some were fractured twice.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF PATHOLOGY.

Meeting held Friday, February 18th, 1916.

Dr. R. J. Rowlette in the chair.

EXHIBITS.

CULTURES OF TUBERCLE BACILLI.

Dr. W. D. O'Kelly exhibited cultures which were prepared in connection with the work he was carrying out under Professor McWeeney for the Medical Research Committee. They illustrated the cultural points of differentiation between the bovine and human types of tubercle bacilli. He fortunately succeeded in making direct cultures on the egg medium, thus getting over the difficulty of isolating the organisms without animal inoculation. The only difficulty now was to secure the material uncontaminated; if this were obviated a high percentage of successful direct cultures should result.

Dr. Bronte exhibited cultures of tubercle bacilli of human, bovine and avian type.

ECTOPIA VESICÆ.

Dr. Boxwell showed organs removed from a female patient, aged 28, on whom Mr. Henry Stokes had previously performed an operation for the cure of ectopia vesicæ. After removal of the uterus, the ureters had been successfully transplanted into the rectum, and for some time the patient had done very well. Subsequently, however, one of the ureters had broken loose from its new point of attachment, probably through defective blood supply in the button of mucous membrane left around the end of the transplanted ureter. A pelvic abscess then formed which opened into the vagina, through which urine was thenceforward voided. The patient ultimately died three months after the operation of ascending pyelonephritis in both kidneys.

The interest of the exhibit mainly lay in the relative rarity of this malformation in a female, and in the condition of the surviving ureteral papilla in the rectum. This was quite pervious, and apparently firmly attached, but was in a condition of superficial necrosis, all the transitional epithelium having perished, with the exception of one tiny shred on its mucous surface, as shown in microscopic sections. This patient had passed for a boy until the date of the first operation, and neither she nor her people were ever disabused of this impression. She had a slight boyish figure, rather hairy arms and legs, and a deep-toned voice, but had total absence of circum-oral hair and had the well developed breasts of a woman.

SPONTANEOUS TUBERCULOSIS IN A RABBIT.

Professor Mettam showed a specimen of above.

The subject was a buck Belgian hare-rabbit kept for stud purposes in the laboratory. It had been in the stock of animals for more than twelve months. During the whole of this time he had not been exposed to infection. He was in normal health until he had an injury to the scrotum, which had apparently been wounded, and looked gangrenous. The part healed without leaving any bad effects. Some time afterwards he was found to have lost condition; he was thin and had lost vigour; indeed he was very weak, and moved

cautiously and slowly, and was inclined to fall over. He had developed a bad attack of auricular acariasis, the auditory canal on both sides being blocked with inspissated pus, desquamated epithelium and numerous acari. (Psoroptes communis *var.* cuniculi.) Shortly afterwards he died. At the *post mortem* examination both lungs contained numerous tubercle-like lesions. No visible lesions were to be observed in the liver. Both kidneys were affected, chiefly in the cortex. No lesions were found elsewhere in the internal organs. The body was very thin. Smears made from the lung lesions revealed the presence of numerous acid fast bacteria. They were not only acid fast, but they also resisted decolourisation by alcohol.

The lung lesions were mostly of some age, necrotic or caseous, some undergoing calcification. Giant cells were few and those seen were at the periphery of the lesion. Numerous bacilli were found in the lesions. Lesions were present in the liver, microscopic and very recent, a generalisation apparently having taken place. The lesions in the kidney approximated in age to those of the lungs, and they also contained acid fast organisms. At the *post mortem* examination cultures were made and a portion of one lung was broken down in a sterile mortar with normal saline and inoculated into the peritoneum of a rabbit, and subcutaneously into the thigh of a guinea-pig. The rabbit was destroyed seventeen days later and a *post mortem* examination made immediately. There was a small quantity of fluid in the peritoneum. The spleen was enlarged, granular, turgescent as in early experimental tuberculosis. In smears a few acid fast organisms were found. The mesenteric lymph gland contained a few acid fast bacteria. There were no naked eye lesions in the gland. In the cæcum and in the large colon remarkable lesions occurred, doubtless the result of the bowel wall being wounded and infected at the time of inoculation. The wall of the bowel was one-third inch thick, firm and fleshy in appearance over an area equal to that of a florin. The mucous membrane was not ulcerated, nor were there any signs of caseation. A scraping from the lesion showed some acid fast bacilli present. The liver was cirrhotic, but contained a few pin-point lesions of a whitish colour, and one acid fast bacillus was found in a smear made from the organ. No lesions were observed in either the lungs or the kidneys. Cultures were made upon inspissated blood serum from the spleen, and an emulsion of the last inoculated into the peritoneum of another rabbit. A microscopic examination of sections made from the lesions of the experimental rabbit (1) showed their tuberculous nature. There was a miliary tuberculosis of the spleen and liver. The lesions in the wall of the intestine were also tuberculous. Acid fast bacilli were found in the bowel lesion. The guinea-pig developed a tuberculous ulcer at the site of inoculation from which issued a discharge containing numerous acid fast bacilli, and the anterior crural lymphatic glands were involved. The ulcer eventually healed and the glands declined in size, and the guinea-pig was still living, six months after inoculation. Rabbit two, inoculated with spleen emulsion of the first experimental rabbit was killed by asphyxia 120 days later, and a *post-mortem* examination made. The animal had lost condition, and was very thin. There was a small lesion on the abdominal wall at site of needle puncture. No peritonitis. Lesions were present in both kidneys up to a pea in size, and situated especially at the poles of the organs. Lesions were present in the cortex extending in some cases into the boundary layer. They were white, firm, and not typically caseous. Acid fast bacilli were found in the lesions. Spleen swollen, rounded borders, no naked eye tubercles. Few whitish specks in the liver. Minute tubercles in the lungs were just visible to the naked eye. There were also present lesions in the epididymis of both testes. Cultures were made from different organs upon blood serum. The cultures in many instances proved to be contaminated, but after some trouble an uncontaminated growth of an acid fast bacillus was obtained. This was now in the third generation, and it was intended to carry out an investigation of the pathogenic properties of the organism. Cultures up to the present had not been abundant, and growth was slow, but the growth when removed by the needle was easily made into a film on the slide. The organisms were readily dissociated and did not remain in clumps as in making a smear of growths of mammalian tubercle bacilli. In this respect the cultures were similar to the avian tubercle bacillus, but this organism usually grew readily, the culture being fatty in appearance and white. Professor Mettam said that when he had completed his researches he would bring forward a further communication on the subject.

MELANOTIC TUMOUR; METASTASES IN LUNGS, LIVER; PORTAL THROMBOSIS AND CIRRHOSIS IN LATTER.

Dr. J. H. POLLOCK showed specimens of above. *Clinical history.*—Male, past middle life, of alcoholic habits. Admitted with a profound degree of ascites. A large, intensely black, freely movable tumour was found above right elbow joint; and a large, firm mass in the right axilla. There was a history of laceration of a congenital pigmented mole by a nail, followed by development of the tumour. Operation consisted in removal of primary tumour and axillary metastases. Death occurred within two to three months. *Autopsy.*—Small pigmented metastases were found throughout lungs and liver, an organised thrombus was found almost completely obliterating the portal vein, throughout its entire length from transverse fissure above to the head of the pancreas below. Polylobular cirrhosis was marked. *Histology.*—Structure of metastases in lungs and liver approached to an alveolar type Dr. Pollock said it was probable that the portal thrombus had been produced by the cirrhosis compressing branches of the portal vein, and thus causing progressive stagnation in main trunk. Metastases in viscera were of such a size as to suggest a dissemination consequent upon opening up of axillary blood spaces during operation.

CARCINOMA OF STOMACH.

Dr. T. T. O'FARRELL showed a stomach removed *post mortem*, which exhibited two ulcers in the fundus and a carcinoma at the pylorus. Free hydrochloric acid had been found in the gastric contents during life.

LIVERPOOL MEDICAL INSTITUTION.

MEETING HELD THURSDAY, MARCH 9TH, 1916.

The President, MAJOR CHARLES J. MACALISTER, in the Chair.

MR. ADAIR DIGHTON related a case of

SARCOMA OF THE NOSE AND NASOPHARYNX.

The tumour was removed under chloroform in September, 1914. The operation performed was a sub-labial-lateral rhinotomy, and in addition a well-shaped section of the upper jaw and palate was removed. The patient was shown. She was healthy, and there had been no recurrence.

The PRESIDENT and Capt. LOGAN discussed the case, and Mr. ADAIR DIGHTON replied.

Dr. F. H. Barendt read an amusing and interesting paper on

THE USE, MISUSE, AND ABUSE OF SOAP.

He described the various pharmacopœial preparations of soap and discussed their relative value. In his opinion far too much soap is used. He concluded with the warning that "soap is a good servant but a bad master."

The President and Major Rushton Parker both joined in the discussion.

Capt. T. R. W. Armour read an interesting paper on

MILITARY ORTHOPÆDICS.

He stated that these cases could be divided into three groups—(1) disabilities occurring in men under training; (2) cases due to wounds or other injuries received on active service. Under the first category were cases of flat feet, hallux rigidus and valgus, pes cavus, internal derangement of the knee, hysterical deformities of hip and spine, sprains and old fractures. These various disabilities were discussed, also the treatment and the prospects of return to duty. Captain Armour prefaced the consideration of deformities acquired on active service by urging the need for attention to the prevention of these deformities, and pointing out how much more might be done for this purpose. He then described a series of deformities produced by fractures of the femur, fractures involving the shoulder, elbow, wrist and hand, injuries to muscles and nerves, and showed several radiographs illustrating the cases. The principles underlying the treatment of each case were discussed and progress described. Reference was made to the value of active exercises carried out under proper supervision as part of the treatment, and the necessity for getting the men to take intelligent interest in their own cases. Several points were brought forward with regard to the adaptability of stumps for the application of artificial limbs.

The paper was discussed by the President, Major Rushton Parker, Mr. Newbolt, Mr. Jeans and Capt. Lloyd Roberts.

SPECIAL REPORTS.

WAR HONOURS.

DISTINGUISHED SERVICE ORDER.

His Majesty the King has been graciously pleased to approve of the appointment of the undermentioned officer to be Companion of the Distinguished Service Order, in recognition of his gallantry and devotion to duty in the field:—

Qrmr. and Hon. Lt. Edward Lyall, 2nd Northumbrian Field Amb., R.A.M.C., T.F., (attd. 185th Tunnelling Co., R.E.). For conspicuous gallantry and devotion to duty. When a large camouflet was blown in by the enemy he hurried through a flooded gallery in the dark, and under heavy fire went for proto apparatus. Finding all the proto apparatus already in use, he hurried on and, although in an exhausted state, descended a shaft without any apparatus, assisted in the rescue of an officer, and then went further, rendered aid to two men, and made a most gallant effort to save two officers.

THE MILITARY CROSS.

The King has been graciously pleased to confer the Military Cross on the following officers, in recognition of their gallantry and devotion to duty in the field:—

Capt. Bernard Grellier, R.A.M.C. (attd. 10th R. Welsh Fus.). For conspicuous gallantry and devotion to duty during operations, when tending the wounded under heavy shell fire. He helped to dig out wounded men who were buried.

Temp. Capt. Leonard Douglas Saunders, R.A.M.C. (attd. 10th Notts and Derby R.). For conspicuous gallantry and devotion to duty. He tended the wounded under heavy fire, and finally evacuated them all with great skill and care. His clothing was torn by fragments of shell, and he was at work for 48 hours without a rest. This is the third time he has displayed great coolness and devotion to duty.

Temp. Capt. Harry Vere White, M.D., R.A.M.C. (attd. 7th Lincs. R.). For conspicuous gallantry and devotion to duty during operations when tending the wounded. His dressing station was repeatedly hit by shells, and he himself was severely knocked about several times, but for 36 hours he stuck to his work.

Temp. Lt. Reginald Peter Nutcombe Brickland Bluett, R.A.M.C. (attd. 8th Durham L.I., T.F.). For conspicuous gallantry. He tended the wounded under heavy shell fire, and was continuously at work for 20 hours. Through his exertions they were removed to a place of safety, although the aid post was unapproachable owing to the enemy's shell fire.

Temp. Lt. John Alexander Harper, M.B., 52nd Field Amb., R.A.M.C. For conspicuous gallantry when leading stretcher-bearers during operations. On one occasion when three of his bearers were wounded, he went alone, under heavy shell fire, to the aid post.

FRENCH DECORATIONS.

THE LEGION OF HONOUR.

The President of the French Republic has bestowed the decoration of the Legion of Honour, with the approval of his Majesty the King, on the following officers, in recognition of their distinguished service during the campaign:—

Grand Officier.

Surg.-Gen. Sir Arthur Thomas Sloggett, K.C.B., C.M.G., K.H.S. (substituted for "Croix de Commandeur," the award of which was announced in *Gazette* dated November 8th, 1915.).

CROIX DE GUERRE.

The President of the French Republic has bestowed the decoration "Croix de Guerre" on the following officers, in recognition of their distinguished service during the campaign:—

Lt.-Col. James Mill, M.B., R.A.M.C., T.F.

Capt. John Arthur Cullum, Canadian Army Medical Corps (attd. 28th Canadian Inf. Bn.).

Capt. Eric Dalrymple Gairdner, R.A.M.C., T.F.

Capt. George Herbert Rae Gibson, Canadian Army Medical Corps (attd. Hq., 1st Canadian Divn.).

MENTIONED IN DESPATCHES.

The following officer has been mentioned in despatches by Rear-Admiral Sir Dudley De Chair for good services in patrol cruisers:—

Staff Surgeon Robert Bernard Scribner, R.N.

OBITUARY.

DR. EDWARD BENNETT, L.R.C.P., L.R.C.S.Edin.

Dr. Edward Bennett passed away, after a short illness, from pneumonia, at Hillside, Lydbrook, Ross-on-Wye. Dr. Bennett, who qualified L.R.C.P. and S. Edin. in 1900, was the elder son of the late Mr. Edward Augustus Bennett, of Marsdon Hall, Nelson, Lancs. He was educated at Owens College and Edinburgh, and after holding various hospital appointments, started practice at Bottesford, and later removed to Lydbrook. He leaves a wife and young family.

DR. FREDERICK F. GERMAN, L.R.C.P. AND S., CAPT. R.A.M.C., SEAFORTH.

We regret to record the death, which took place on March 27th, at Seaforth, Liverpool, of Captain Frederick Francis German, R.A.M.C., one of the oldest medical practitioners in the district.

The deceased, who was in his fifty-sixth year, studied medicine at Edinburgh, qualifying L.R.C.P. and S. in 1881. He had practised in Seaforth for upwards of thirty-three years.

Dr. German was always greatly interested in military matters, and eighteen years ago held the rank of captain in the old Lancashire Artillery (Volunteers). He resigned his commission in 1907, but continued in the capacity of relieving medical officer at the Seaforth depôt. Upon the outbreak of war he took

charge of the military hospital at Seaforth, and later was given a temporary captaincy in the Royal Army Medical Corps. He was also surgeon to the Lancashire County Police (Seaforth Division) and the Liverpool Overhead Railway Company, Ltd.

He leaves a widow, daughter, and son, the latter being a staff-sergeant in the Royal Field Artillery.

DR. OLIVER SCANLAN, L.R.C.P. AND S., MIDDLESBROUGH.

The death has occurred very suddenly at Middlesbrough, of Dr. Oliver Scanlan. Dr. Scanlan had been associated in practice with his brother, Dr. A. E. Scanlan, for the past 14 years. Educated at Glasgow, he qualified L.R.C.P. and S.Edin., L.F.P.S.Glasgow in 1901. He was a bachelor.

Medical News in Brief.

Need of Army Doctors.

The following is the latest official announcement on this important question :—

In order to maintain the supply of medical officers required to meet the needs of the military services, it is urgently necessary in the interests of the civil community no less than of our Armies that *all* qualified medical men not exceeding 45 years of age, irrespective of their circumstances, should without delay enter their names under the enrolment scheme which has been established by the Central Medical War Committee, and has the authorisation of the War Office.

The work of enrolment is carried out by three representative bodies of the medical profession known as the Central Medical War Committee for England and Wales, the Scottish Medical Service Emergency Committee, and the Irish Medical War Committee. It should be understood that enrolment does not mean that the medical man is at once called up for service in the R.A.M.C. ; he may never be called up, and in any case will not be called up until the proper time has come for his services to be accepted. The real purpose of the scheme is to secure that those doctors are selected for military purposes who can best be spared at the particular date and from the particular place, with due regard to the needs of the civil population, and to the personal circumstances of the doctor, and to the requirements of the Armies.

To carry out efficiently the comparative process necessary for an equitable distribution of the burden as it affects the medical profession and the civil population, it is evident that *all* doctors of suitable age should have offered themselves for service, so that a proper selection may be made by a body equipped with the requisite information from all parts of the country and thus competent to make the necessary comparisons. The only alternatives are haphazard recruitment and arbitrary demand.

Work of the Committees.

It is for these reasons that the War Office has officially recognised and now relies upon the Central Medical War Committee and the corresponding Committees in Scotland and Ireland. These Committees include representatives of the Royal Colleges of Physicians and the Royal Colleges of Surgeons, of the universities and medical schools, and of the British Medical Association ; and have associated with themselves in their work representatives of the Government Departments mainly concerned.

The Committees have an organisation of representative local committees in all parts of the three countries, from which they obtain local information and advice ; and they work in daily contact with the various Government Departments concerned.

Furthermore, for the purpose of considering and advising, through the Central Committee, on cases in England and Wales having such special features as exist, for instance, in regard to the staffs of the Metropolitan hospitals, a Committee of Reference has, with the approval of the War Office, been now established by the Royal College of Physicians of London and the Royal College of Surgeons of England acting jointly.

University College Hospital.

The annual meeting of the Corporation of the University College Hospital was held on March 30th at the hospital. Sir Ernest Hatch, who presided, in moving the adoption of the report, said that the number of beds had been increased from 305 to 447. In all 2,000 wounded soldiers had been received as in-patients and over 15,000 as out-patients. The medical staff had been greatly depleted, and a large number of the employees had joined the colours. They had 543 men, including students, and 63 nurses serving at the front. Twenty-eight had been mentioned in Despatches, and one was awarded the V.C. Other distinctions gained included C.B.'s, four C.M.G.'s, four Military Crosses, and one Royal Red Cross. The Roll of Honour showed eleven killed. The extra cost of food, in some cases as much as 50 per cent., had caused considerable concern, and among the many difficulties with which the hospital had to contend was the unprecedented rise which had taken place in the cost of many of the principal chemicals and drugs. These increases were no doubt in some degree due to abnormal medical needs, but in most instances they were attributable to the fact that the drugs had hitherto been solely obtained from Germany.

The Duke of Bedford was unanimously elected President of the Corporation of the Hospital for the ensuing year.

White Labour in the Australian Tropics.

Referring to the problem of settling the northern and tropical portion of Australia with "white" labour, Professor Gilruth, the Administrator of the Northern Territory, in a recent report, says : "I am still of the opinion that the climate offers no bar to the proper development by white labour. In certain quarters it has been stated that two or three generations will be required to demonstrate the truth or otherwise of such a contention ; but, if no attempts be made voluntarily it is difficult to conceive how the proof will ever be obtained. What can be asserted now is that, given freedom from tropical and other infectious diseases by importation, the evidence available is that the Territory is quite as healthy for white people as any other part of the world. Indeed, it is probably the only part of the continent where men may be seen at any time and all times of the year engaged in hard physical labour in the open air undressed from the waist upwards but for an ordinary felt head-covering. The fear of sunstroke does not exist, and its occurrence in such circumstances appears unknown in the Territory."

The Finsbury Dispensary.

It has been decided, in view of the war, to abandon the customary biennial festival of the Finsbury Dispensary, which falls due this year, and on which the committee relied for substantial help. It is therefore necessary to obtain by some other means more funds. The Lord Mayor is appealing for contributions to be sent to him at the Mansion House, or to the secretary of the Dispensary, Brewer Street, Goswell Road, E.C.

New Hospital Ship at Basra.

The hospital ship Sikkim has arrived at Basra. She is a fast, comfortable ship, double-decked, and equipped with electric light and fans, an operating theatre, bath room and accommodating 144 cots.

Health of Leeds School Children.

The Acting School Medical Officer to the Leeds Education Committee (Dr. Lee Bolton) has prepared an exhaustive report on the work of medical inspection of the school children of the city for the year ended December 31st last. The number of children examined during the year was 17,628, as compared with 14,579 for the previous year, an increase of 3,049.

The percentage of parents who attended the examination of their children was 65.4. When parents attended it was generally found that the necessary

treatment was secured without trouble. There was a slight improvement in the proportion of scholars with satisfactory clothing and footgear, and a decrease in the number returned as uncleanly or verminous. More than 15 per cent. of the children, however, were still attending the schools in a dirty or verminous condition.

Of the 17,628 children examined, 12 per cent. were below normal, and 2.6 per cent. were bad. The number of defects of the nose and throat was 3,885. With the exception of cases of much enlarged tonsils, the percentage of these conditions was lower than that of the previous year. There was a decrease in the number of cases of enlarged glands. There has been a continued improvement in regard to dental caries, for whereas in 1914 25.4 per cent. of the scholars had four or more decayed teeth, in 1915 this figure had dropped to 19.3 per cent. a difference of 6.1 per cent. Poor district schools show the lowest percentage of dental caries, viz.: 57 per cent., whereas in the better district schools the percentage is 62.4, and in the surburban schools 63.7 per cent., while in the Jewish schools it is as high as 74 per cent. The total percentage for all the schools is 61.2 per cent.

Cases of heart affection numbered 167, or 9 per cent. of those examined. There was a great increase in the number of cases of ophthalmia, and the school medical officers reported 1,238 cases of ringworm. Under the head of rickets, the returns indicate 2.3 per cent., against 3.2 last year. Phthisis and suspected phthisis cases have not increased. The dull and backward children were 1 per cent. fewer. 43.3 of the 10,308 children whose eyesight was tested were found to have more or less defective vision. In infectious disease there was a marked decrease.

Ozone "Tired Feeling."

At the March meeting of the Röntgen Society, Dr. W. Harwood Nutt said that several X-ray workers complained of headache and sleepiness after a short time in the X-ray room. In his opinion this was due, not to the ionisation of the atmosphere, but to the generation of ozone, and some experiments he had conducted showed that ozone was actually produced in the neighbourhood of the tube.

Major Wilson, of the Canadian Medical Service, believed that the tired feeling was due to ozone, no matter whether generated from the terminals of the tube or those of the transformer itself.

Heroic Hamilton Doctor's Death.

Particulars are to hand in letters received from the Colonel Commanding and the chaplain as to how Dr. John Wilson, Hamilton, Captain R.A.M.C., who was attached to the 10th Battalion Duke of Wellington's Own, met his death. The Colonel states that at 9.30, on March 9th, a message was received that several men were wounded in a central trench. Captain Wilson at once volunteered to go to their assistance, although it was necessary to cross absolutely open ground swept by the fire of the hostile trenches. He reached the wounded men, bandaged up those who most required it, and was on his way back to shelter when he was fired upon by the Germans from their front line trenches, and a bullet struck him just above the heart. He died in a few minutes. The colonel adds that Captain Wilson by his energy and devotion to duty had earned the appreciation of every man in the battalion, and the Colonel only ten days before had had the pleasure of recommending him for the Military Cross.

Newcastle Infirmary.

The annual Court of Governors of the Royal Victoria Infirmary, Newcastle, was held on March 25th. The Lord Mayor moved the adoption of the annual report, already published, and remarked that it was the best report ever produced by the institution.

Every page of it told a story, the same story of difficulties that had been encountered and surmounted. There was victory on almost every page.

Time was a great testing force of men and things and institutions. That was true of all times, but it was particularly true of war time. War time was a great testing force, and it had been testing this institution in every department and in its being.

His Lordship paid tribute to the increased subscriptions of the workmen, which was eloquent, in his opinion, of their confidence in the institution, and, amid loud applause, tendered his congratulations to Sir George Hare Philipson on his association of over half a century with the institution. He had, said his Lordship, "played a straight game, had kept a straight bat, and was 52 not out."

Army Medical Arrangements.

Sir Alfred Keogh, speaking in London, on March 29th, said he was, as they knew, in charge of the medical arrangements for the Army in England, France, Mesopotamia, and the Mediterranean, and they could look the public in the face for the first time and say they were doing their best. During the last ten years the Government did make every adequate preparation for the war on the medical side, and that was why, when the present campaign began, they were in a fit state to take on the responsibilities that fell upon them.

Hospital Saturday Fund.

The forty-second anual meeting of the Hospital Saturday Fund will be held at the Mansion House, on Wednesday, April 12th, at 7.30 p.m. The Lord Mayor will preside, and an address will be given by Sir Alfred Pearce Gould, senior surgeon at the Middlesex Hospital, on "The Effects of the War on Work in Civil Hospitals."

During last year, notwithstanding the many and varied appeals made to the public in connection with the war, the income of the fund steadily progressed, with the result that the total reached £36,809, as compared with £30,130 for the previous year.

Rheumatism at Nuneaton.

At a meeting of Nuneaton Town Council, on March 29th, Mr. J. H. Whitehouse suggested that samples of water from the different public sources be submitted for analysis, with a view to determining whether there is anything in the water to account for the prevalence of rheumatism in old, young, and middle-aged persons. That disease had never been so prevalent in the district as during the past twelve months.—The suggestion was adopted.

Chemo-Therapy.

We direct our readers' attention to the announcement that a paper will be read on April 13th, at 5 p.m., at the Royal Society of Medicine, 1, Wimpole Street, W., by Mr. J. E. R. McDonagh, on "The Rationale and Practice of Chemo-Therapy." The paper will probably be followed by a discussion. We expect the paper and discussion to be of exceptional interest, especially as leading chemists are likely to be present.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s., post free at home or abroad

Foreign subscriptions must be paid in advance. For India Messrs. Thacker, Spink and Co., of Calcutta, are our officially appointed agents. Indian subscriptions are Rs. 15.12. Messrs Dawson and Sons are our special agents for Canada. For South Africa, The Record Publishing Co., Cape Town. Messrs. Geo. Robertson and Co., of Sydney and Melbourne, are our special agents for Australia.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Omega.—The matter is one to which our attention has been recently directed, and in an early issue we shall deal with it in our editorial columns.

DR. G. T. MABERLEY.—Phenol-phthalein as an aperient is not altogether free from danger. A fatal case has been recorded, following a dose of about five grains.

FURTHER AID FOR SERBIAN WOUNDED.

AN additional doctor and seven nurses are to be sent out by the Wounded Allies Relief Committee to strengthen the medical unit already despatched to aid the sick and wounded Serbian soldiers in Corfu.

M.D., M.R.C.P.—It is scarcely to be presumed that German drug preparations after the war will cease to be prescribed altogether by the medical profession in this country. Undoubtedly a protective tariff would materially assist the English manufacturing chemist in this regard. But he would require to be enterprising, more so than in the past, and be prepared to introduce novelties such as would defy competition.

MENS SANA IN CORPORE SANO.—There is much to be said for our correspondent's contention. Unfortunately, however, it is contrary to the Army Regulations, and at present at least, that is as much as can be said on the matter.

UNGALLANT!

BRIXTON dispensary has found it inadvisable to appoint a lady practitioner, because of the extraordinary antipathy amongst the poor to lady doctors.

DR. K. J. M. (Rosscarbery).—The Post-Graduate Society to which you refer, ceased to exist several months ago; this is probably the reason why you have received no reply Regarding your second question, we know of no work on "Tactics and Therapeutics." There are, of course, several reliable text-books on Therapeutics which might answer your requirements. If we can assist you in your choice please write us further particulars.

EFFECTS OF THE WAR ON CHILDREN.

DR. ROMEO MONTI, chief physician of St. Anne's Hospital, the largest children's hospital in Vienna, is reported to have said, "that the general strength of children, in comparison with normal times before the war, has seriously decreased in consequence of the changed conditions of life."

DR. A. (Edinburgh).—The presence of calculi in the bladder and blood in the urine is an ominous symptom of Hæmaturia.

SQUILLS AS RAT POISON.

A NEW rat poison, an extract of squills, which has been used by the French Government in the trenches for two or three months, is to be used in a Berwickshire County Council experiment to exterminate rats.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, APRIL 5TH.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—5.30 p.m.: Prof. A. Keith. 4 p.m. to 7 p.m.: Exhibition of Anatomical Preparations and Specimens in the Theatre on lecture days, and between 10 am. and 5 p.m. in the Hall of the Museum on the following day.

THURSDAY, APRIL 6TH.

ROYAL COLLEGE OF PHYSICIANS OF LONDON (Pall Mall East).—5 p.m.: Lumleian Lectures: Dr. F. E. Batten: Acute Poliomyelitis. (Lectures II. and III.)

FRIDAY, APRIL 7TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF LARYNGOLOGY) (1 Wimpole Street, W.).—4 p.m.: Dr. L. H. Pegler: Case of Laryngeal Tuberculosis. Mr. E. D. D. Davis: (1) Report of a Case of Laryngeal Crises, with Abductor Paralysis (Sections of the Brain, Spinal Cord, and Vagus Nerves will be demonstrated); (2) Laryngeal Stenosis following a Bayonet Wound treated by Intubation. Mr. Herbert Tilley: Cases illustrating Results of Intranasal Operation for Chronic Frontal Sinusitis. Dr. James Donelan: Case of Paralysis of Left Vocal Cord in a Young Woman. Dr. Jobson Horne: Two Cases of Suppuration in the Antrum of Highmore due to Uncommon Causes. And other cases.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital, Hammersmith Road, W.).—8 p.m.: Special Clinical Evening.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—5.30 p.m.: Prof. A. Keith. 4 p.m. to 7 p.m.: Exhibition of Anatomical Preparations and Specimens in the Theatre on lecture days, and between 10 am. and 5 p.m. in the Hall of the Museum on the following day.

Vacancies.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—East Grinstead (Sussex), Newport (Mayo).

Royal Devon and Exeter Hospital, Exeter.—Senior House Surgeon. Salary £250 per annum, with board, apartments, and washing. Applications to Samuel S. Cole, Secretary.

Putney Hospital (Chester Bequest), Lower Common, Putney, S.W.—Resident Medical Officer. Salary £150 per annum, with rooms, board, and laundry. Applications to the Hon. Secretary, 198 Upper Richmond Road, Putney, S.W.

St. Bartholomew's Hospital, Rochester, Kent.—Senior Resident House Surgeon. Salary £300 per annum. Applications to Charles Speyer, Secretary.

The Guest Hospital, Dudley.—Assistant House Surgeon. Salary £120 per annum, with board, residence, and washing. Applications to the Secretary.

The Royal Surrey County Hospital, Guildford.—House Surgeon. Salary £150 per annum, with board, residence, and laundry. Applications to the Secretary.

Durham County Hospital.—House Surgeon. Salary £150 per annum, with board and lodging, and war bonus at the rate of £30 a year. Applications to Wm. R. Wilson, Secretary, 68½ Saddler Street, Durham.

Norfolk and Norwich Hospital, Norwich.—House Physician. Salary £400 per annum, with board, residence, and laundry. Applications to Frank Inch, Secretary.

Westmorland Consumption Sanatorium and Home, Grange-over-Sands.—Second Assistant. Salary £200 per annum, with apartments, board, and laundry. Applications to C. F. Walker, M.D.Lond., D.P.H.Man., Medical Superintendent, Tuberculosis Officer for Westmorland.

Chesterfield and North Derbyshire Hospital.—Second House Surgeon. Salary £150 per annum, with board, apartments, and laundry. Applications to the Secretary.

Appointments.

PRICE, C., M.R.C.S., L.R.C.P., Resident Medical Superintendent of the Children's Infirmary, Cleveland Street, W.

ROBERTS, H. S. W., L.R.C.P. and S.Edin., Certifying Factory Surgeon for the Ballindalloch District, co. Banff.

LAM, PING WING, M.B., Ch.B.Edin., has been appointed Resident Medical Officer to the Leicester Board of Guardians.

PEACHELL, GEORGE ERNEST, M.D., B.S.Lond., L.R.C.P., M.R.C.S., has been appointed Medical Superintendent at the Dorset County Asylum.

Births.

BIGGER.—On April 2nd, at Cairo, the wife of W. K. Bigger, Lieut., R.A.M.C. (*née* Dorothy Vigers), of a son.

CLARKE.—On March 28th, the wife of Lieut. H. H. Clarke, R.A.M.C., of a daughter.

HERDMAN-NEWTON.—On March 30th, at Walker Vicarage, Newcastle, the wife of R. H. Herdman-Newton, Surgeon, R.N., of a daughter.

IREDELL.—On April 2nd, at 7 Cumberland Terrace, Regent's Park, the wife of DR. C. E. Iredell, of a son.

PARTRIDGE.—On March 28th, the wife of Victor S. Partridge, L.R.C.P.Lond., M.R.C.S., of 131 Coldharbour Lane, S.E., Temp. Lieut., R.A.M.C., of a daughter.

ROBINSON.—On March 25th, at The Cottage, Blundellsands, the wife of G. Burton Robinson, Captain, R.A.M.C. (T.F.), West Lancs Field Ambulance, of a son.

SPARROW.—On March 29th, at 24 Essex Road, Watford, the wife of E. C. Sparrow, M.B., temporary lieutenant, R.A.M.C., of a daughter.

WORTH.—On March 24th, at Middlesex County Asylum, Wandsworth Common, S.W., the wife of Dr. R. Worth, of a son (still-born).

Marriages.

BENTLEY—SCOTT.—On March 28th, at St. Mary's, Kennington, Kent, Richard John Bentley, M.B., B.S.Lond., of Northend, Ashford, to Ida Mildred, eldest daughter of Major H. W. Scott, the Lancs Fusiliers, of Temple House, Kennington.

DEVINE—MILES.—On April 1st, at Our Lady and St. Joseph's, Poplar, Major J. A. Devine, D.S.O., R.A.M.C., of Winnipeg, Canada, to Mary Hilda, only daughter of the late Henry Miles, of Liverpool, and of Mrs. Miles, of 99 Cambridge road, Southport.

GUINNESS—CHARRIOL.—On March 30th, quietly, at St. Mary of the Angels, Bayswater, Alexander F. Grattan Guinness, R.A.M.C., third son of the late Dr. H. Grattan Guinness and Mrs. Guinness, of "Mount Hermon," Sydenham, and Inez Annita Craufuird Charriol, eldest daughter of the late Monsieur et Madame Pierre Charriol.

HUNTER—CAPE.—On March 31st, in London, by licence, Capt. Ronald Nelson Hunter, R.A.M.C., eldest son of Mr. and Mrs. C. D. Hunter, of Buckhurst Hill, to Isabella, eldest daughter of Mr. and Mrs. J. Wilson Cape, of Carlisle.

WAUGH—PICKERSGILL.—On March 27th, at Christ Church, Sunderland, William Grant Waugh, Captain, R.A.M.C., eldest son of Percival Waugh, 21 Cluny Gardens, Edinburgh, to Enid, only daughter of the late Charles Pickersgill and of Mrs. Pickersgill, The Elms North, Sunderland.

Deaths.

LAMBERT.—On March 29th, died on active service, Major F. C. Lambert, R.A.M.C., eldest son of Lt.-Col. Lambert (late), R.M. Artillery, of Lyston, Branksome Park, Bournemouth, aged 37.

LEON.—On March 30th, at 23 Grove Road, Southsea, of cerebro-spinal meningitis, John Temple Leon, M.D.Lond., Captain, R.A.M.C. (T.), aged 50.

MACPHERSON.—On March 31st, at Barrogill, Bothwell, N.B., William Grant Macpherson, M.B., elder son of the late Rev. James Macpherson, of Canisbay, N.B., in his 54th year.

OWEN.—On April 2nd, suddenly, Samuel Walshe Owen, L.R.C.P., M.R.C.S., L.S.A., of 188 Holland Road, Kensington, younger son of the late Major T. R. I. Owen, of the Bengal Staff Corps, in his 66th year.

PRICE.—On March 29th, at Hoopers Hill House, Margate, William Price, M.D., last surviving son of David Price, M.D., of Margate, aged 79 years.

SALTER.—On March 28th, very suddenly, at Royal Berks Hospital, Reading, Stephen Thomas Salter, M.A., M.B., son of the late Stephen Salter, of Woburn Place, and Watford, aged 57.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

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AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

The Budget. FROM the point of view of the Medical Profession, Mr. McKenna's second Budget must be considered a disappointing one. It is equally disappointing in what it does, and in what it does not do. That existing taxes would be raised and new taxes imposed was, of course, inevitable, but it would be impossible to admit that in this case the extra burdens have been placed on the shoulders best able to carry them; nor can it be said that the important question of the public health has been given the careful attention which a far-seeing statesmanship would have assigned to it. It is becoming increasingly evident that legislative enactments of every kind trench on the domain of the sanitarian, and it is the duty of members of the profession to bring this fact out whenever occasion serves. Budgets, especially, are very potent factors for good or evil in this direction.

Motor-Cars. LEAVING aside the fact that, in raising the income-tax, the present proposals do not draw a sufficient distinction between earned and unearned incomes—a matter upon which a hygienist might have much to say—the new taxes offer abundant material for criticism from the point of view I am considering. Taking the relatively innocent-looking tax on motor-cars, it must be obvious to anyone that a distinction should be drawn between a car used purely for pleasure and one which is used solely for business or professional purposes. That the opulent ladies who, on their way from one smart charity gathering to another, rolls-royce about the London streets, covered with pekinese, should contribute on anything approaching the same level as, say, a busy practitioner, is a ridiculous anomaly. And the busy practitioner is by no means the only person who requires consideration under this head. There are other kinds of work almost as necessary to the community as doctoring, in which motor-cars have become essential. In this matter a very hard and fast line should be drawn between necessaries and luxuries. Mr. Goschen, when Chancellor of the Exchequer, drew such a line in the matter of horses, and Mr. McKenna could do it in the matter of motors.

Travel. THE new tax on railway tickets is by no means free from objection. With the "back to the land" campaign in full cry; with sanitarians, Dr. Brend at their head, insisting upon the importance of pure air in the saving of infant life; and with doctors daily and increasingly prescribing change from town to country or seaside in convalescence and threatening disease, here comes the Government with a measure which will certainly do a great deal to discourage travelling, especially systematic, season-ticket travelling, with the result that people will be herded into the towns. The "back to the land" campaign will die of inanition and His Majesty's lieges of tubercle; British health resorts will suffer, convalescence from illness will be prolonged, and threatening disease will progress to its devastating conclusion. Travel, even for pleasure, is much more a function of health than the mere politician seems to realise.

Mineral Waters. THE cynic might find something to say on the fact that, whereas spirits, wines and beers are not touched, mineral waters are boldly attacked. This is presumably an invitation to the teetotaller to "do his bit." But, apart from the fact that there is nothing whatever to show that the teetotaller is in any degree a slacker or shirker, either militarily or financially—indeed, the facts point in precisely the opposite direction—the tax catches a good many beside the teetotaller. It catches the constipated, who find relief from the sulphated waters; it catches the people, and they are many, who cannot drink chalky water with impunity, and forces them to consume the hard water with which London and many other places are served. Much energy and eloquence, and a few shining examples, have placed before us the virtues of teetotalism in war-time, and now comes the Chancellor with a heavy back-hander for those who, by much tribulation, have learnt to prefer Malvern Water to someone's XXX. Let us hope that such people will be able to appreciate the humour of the situation.

Sugar and Coffee. THE extra taxes to be levied on sugar and coffee must seem to the medical man wholly indefensible. Such an important article of food as sugar, which, owing to the general dislocation of

pre-war conditions, has already risen enormously in price, ought not to suffer a further burden until other sources of revenue have been tapped. Sugar is one of the chief food-stuffs of the poor, especially of the children of the poor, and its supply to the lower classes ought not to be curtailed by taxation unless the reasons for so doing are really overwhelming; and this they obviously cannot be. The further taxation of sugar is almost as serious a matter as the taxation of bread. Nor does there seem to be any adequate excuse for the further taxation of coffee. Coffee is an agreeable, a harmless, and in many cases a very desirable stimulant, and it is not right that it should be made to contribute any more while the alcoholic stimulants remain untouched.

Patent Medicines.

WHEN attacking the morally and medicinally innocent mineral water group, it is a pity that Mr. McKenna did not carry the excellent principle which he established last year still further along its beneficent course, by increasing the tax on proprietary medicines. These commodities yield enormous profits to their proprietors, while conferring no commensurate benefits upon the public. That some of them are harmless is quite true, but when they are harmless they are frequently inert. Some of them —as, for example, the purgatives—are beneficial, but even in the case of these the buyer pays a sum for his purgation which is about 75 per cent. above the ordinary market value of the active ingredient. All of them, however, are by no means harmless, and their taxation, even out of existence, would materially contribute to the well-being of the community. A writer in the *Westminster Gazette* says: "A great reform has been missed in the omission to increase considerably the duties on patent medicines, at the same time using the opportunity to insist on the labels bearing a description of the composition of the article, the proportion of the ingredients, and the amount of the dose." I cordially agree.

Dogs

BUT the most regrettable omission from the present Budget proposals is the failure to increase the dog licence. The vast majority of dogs are pure luxuries, whose owners can well afford to pay a vastly increased price for the pleasure which these quadrupeds undoubtedly confer. But they are not only luxuries; they are extravagancies. The amount of food eminently fitted for human consumption which is daily and daintily sacrificed at this particular shrine must represent an enormous sum of money—and this at a time when everyone is being urged to practise economy in every possible direction. Not long ago, at an hotel at the seaside, I counted six elderly moth-eaten ladies who left the dining-room with plates full of food, collected during the table d'hote dinner, which they were taking to their dogs upstairs. On economical grounds alone it is surely more just to tax this sort of thing than to raise the price of sugar or coffee.

and Disease

BUT considerations of economy in food are by no means the most convincing reasons which can be urged in favour of the deterrent taxation of dogs, especially in towns. That there are such beings as human "carriers" of typhoid fever is now well known, and there is not a shadow of a doubt that dogs may be "carriers," not only of typhoid, but of other diseases. The greatest possible care is rightly given to the proper disposal of human excrement. Millions of pounds have been spent on main drainage schemes, and the public official's solicitude for the sanitary condition of the individual house amounts to an inquisition. That is exactly as it should be, but every standard of true hygiene is being clothed with derision so long as dogs remain the licensed libertines of the streets.

in Towns.

SETTING aside the extra cost of scavenging which they entail upon the public official, it must be within the disgusting experience of everyone that much of the scavenging is done both involuntarily and inefficiently by the boots of the passers-by; with immediate results into the details of which it is not necessary to enter. The remote results are, of course, impossible to trace, but it requires very little imagination to find in them a very large number of those cases of so-called sporadic disease which baffle the most careful search into their origins. I have on several occasions pointed out the danger to the public health which the present dog-licence encourages, and I find that during the last few weeks several letters have appeared in the lay press insisting upon the same obvious truth. It is a great disappointment to all those who have the well-being of the community at heart that Mr. McKenna has turned a deaf ear to the suggestions which have been made to him on this subject. If the whole truth were known, it would almost certainly appear that one of the most potent factors in raising the death-rate of children was the practice of keeping canine pets.

Cats.

THE proposal which has been made that cats should be taxed or licensed is based on the belief that, in common with dogs, these domestic animals are carriers and propagators of disease germs. That may or may not be the case; it is at any rate certain that the cat has a good deal more to the credit side of his account than can on the most liberal estimate be allowed to the dog. Professor Robert Wallace, of Edinburgh, points out that but for cats the country would be absolutely overrun with rats and mice, with the almost certain result that bubonic plague would become an ever-present scourge. Moreover, even as things now are, rats and mice are computed to destroy foodstuffs to the annual value of twenty millions sterling, a figure which would be very largely increased if people were deterred by taxation from keeping cats. Professor Wallace pleads for more care in breeding the right type of cat. For the lady basket cat a good ratter should be substituted, and he should be encouraged to find his own food.

Foresight. The callousness of legislators about most questions of public health is a by-word among sanitarians. At the present moment solicitude for the future of the race is everywhere uppermost, except in Parliament. At Westminster if you dare to look more than three years ahead, you are voted a visionary and a bore. To propound a question which will not come to fruition for twenty years is to stamp yourself as academic and unpractical; and so our lawyer legislators continue to treat symptoms with hastily improvised emergency measures instead of studying to correct the original dyscrasia. An article such as that which Dr. Brend contributed to the "Nineteenth Century" for March, to which I referred last week, is likely to fall on stony ground, for the land is under the sway of the opportunist, unimaginative lawyer-politician. I do not pretend that the problem which Dr. Brend exposes with so much ability is one which is easy of solution, but I maintain that it is one for which everyone with any claim to the title of statesman should at once set himself to find a solution.

Town and Country. The problem is this. From the points of view both of health and of economics it is very desirable that people should go back to the land. Instead of doing this, however, they continue to swarm into the towns, and so far as one can see at present, unless something is done to render the land more attractive, the living call of the towns will continue in increasing measure to prevail. The desire for "more life and fuller" is a very intense one. Amongst country people it may take a form no more clearly defined than a "blind desire," but for the man who has once tasted it, the gregarious life of the city will always hold compensations for the loss of what the country alone can offer in healthfulness and peacefulness. A short life and a merry one is not a mere adage. The saying represents a fundamental preference which is innate in the majority of both men and women, and they will take the risks of conditions which are said to impose the shortness, provided they can be assured, if not of merriment itself, then certainly of the possibility of escaping from boredom.

Back to the Land. It seems, therefore, that the compaign to return the people to the land is foredoomed to failure. The attractions of the towns must be regarded as a ground fact, from which there is at present no escape, and a real foresight would look this fact in the face and seek to mitigate what it cannot prevent, namely, the evil effects upon health generally and infant mortality in particular which town conditions at present impose. We have already secured sound drainage and pure water, and the logical outcome of Dr. Brend's paper is that we should at once set about promoting pure air. Much has already been done in this direction. Of town planning, garden cities, and the like, Dr. Brend writes with unqualified approval; but much more remains to be done. The dust from the whirling motor and the smoke from the domestic chimney are still with us. Asphalting and paving of the main streets have tended to lessen the former, and the nuisance of the latter has been much abated since the improvement in gas fires and the introduction of electric heating. These should be encouraged; but there are other things which ought to be attempted.

Central Heating. What is known on the Continent as central heating is almost unknown in this country. It is, of course, installed in many modern mansions, both town and country, but it has made little or no progress in the case of moderate-sized houses, and still less in groups of small houses. And yet, if builders were to be urged thereto by the local authorities it would be easy for them to instal one central heating-furnace for each block of houses. Such an arrangement would not only reduce the cost of warming an individual house, but the warming would be much more efficient, and there would be no smoke. Such systems could be applied to existing blocks, and, in the case of moderate sized houses, they would probably be very much appreciated. The obstacle is the initial cost of installation, and it is here that the local authority could intervene with great effect. If the system were worked by the authority the undertaking would very soon become a paying concern. The great obstacle to any such scheme is the senseless tradition that an Englishman's house is his castle. In so far as it is his castle, the ordinary Englishman's house is a very ill-managed castle, to the dungeons of which he is careful to consign both his thrift and his health.

Upper Air-Passages. Another direction in which the well-being of town dwellers could be more carefully safeguarded than it is at present is by paying very special attention to the upper air-passages in young children. Considerable improvements have already been effected in this matter, but a cursory glance through the pages of the new edition of Sir St. Clair Thomson's book have impressed upon me the necessity for doing a great deal more. But of this, more anon. Sinapis.

CURRENT TOPICS.

The Troublesome Useless Uterus.

In a recent number of the *New York Medical Journal*, Dr. Ernest Gallant has laid down some very definite rules for the recognition and treatment of what he terms "the troublesome useless uterus." As to treatment, there is no question: it is always to be hysterectomy. Besides such obvious causes as cancer and multiple fibroids, he considers that many uteri are rendered troublesome and useless by the presence of pus tubes, adhesions, perforation, or syphilis. Lastly, he includes a series of cases showing a number of allied symptoms due for the most part to the partial prolapse of a heavy, sub-involuted uterus, the seat of endometritis. Hysterectomy is a drastic alternative to the use of a pessary, but the author of the paper finds it as a rule more satisfactory. To many gynæcologists his statement that it is unwise to amputate the cervix of a partially descended uterus will come as a distinct surprise. Hysterectomy is

not generally considered an advisable procedure for the cure of prolapse. The cystocele and rectocele, which have caused perhaps the most unpleasant symptoms, still remain and tend to become further exaggerated. Dr. Gallant having proved this fact, advocates in every case complicated by these conditions a complete or partial colpectomy. Some of us are less heroic in our treatment, and even flatter ourselves that we can get good results from our favourite combination of the various operations which come under the heading of vaginal repair, together with suspension or fixation of the fundus uteri. Nevertheless, this paper is of great interest. Some 30 cases are fully described, and the writer has, on the whole, no cause to be dissatisfied with his results. The most obvious criticism is to propound the question whether the troubles of those eighteen women upon whom hysterectomy was performed before the menopause could have been relieved and their uteri at the same time restored to utility. Dr. Gallant is convinced that the answer to this question is in the negative. Some gynæcologists will find it hard to agree with him.

Reminders.

A FEW hints from Baltimore may be timely in the matter of hospital administration and efficiency. The cost per head is no index to the quality of work done. Attention is to be concentrated upon the patient, and in this matter are to be considered courteous attention, even to the poorest, prompt and skilful medical attendance, careful and sympathetic nursing, to be combined with complete study and accurate record of clinical findings, not only in relation to the particular case *per se*, but also with reference to the disease as an abstract study. Finally, discharge of the patient, not prematurely—with full directions for his domestic procedure—and a recollection of him for future purposes as an individual human being—and not a mere cipher or number in a register. Our readers may smile and wonder at such a list of accepted platitudes. But there will be many of us who may experience, not serious self-accusation, but some searchings of the heart for shadows. There may have been, not negligence, but postponements—irritability rather than incivility, a tendency to dwell upon a case rather as a specimen of interest than as a human brother or sister, of the same subtle and complex structure as ourselves.

French Infantile Mortality.

PROFESSOR A. PINARD reports that infantile mortality has been lower in France during the present war than ever before, whilst the health of the children has been better. During the first year of the war the death-rate of mothers after confinement was lessened; the proportion of still-born children, instead of increasing, as had always been the case during previous wars, diminished; the proportion of children placed in foundling hospitals at birth also decreased. The number of prematurely born children was reduced. The average weight of children at birth increased.

Prof. Pinard asserts that never have so fine and healthy children been seen in Paris as now, and gives as the reason that they have never been better cared for. This justified completely the measures taken at the beginning of the war for protecting mothers before and after child-birth; for encouraging and assisting mothers to nurse their own children; and, when necessary, for supplying sterilised milk obtained from cows in a special herd—the property of, and under the supervision of the City of Paris.

Professor Pinard concludes with a warning note. In the last few months infantile mortality, although still below that of 1913, has risen above that of the first year of the war. He attributes this to the fact that trade is being gradually resumed, while the number of male workers has scarcely increased, so that mothers have been tempted to work under conditions less favourable to their offspring, and also to take up harder kinds of work.

Nerve Injuries in the War.

THE Société de Neurologie has just concluded a session in Paris, which was attended by representatives from all the military centres for neurological work in France. The British War Office sent Col. Aldren Turner, and Colonels Gordon Holmes and Percy Sargent represented the neurological centre in Boulogne. Dr. Henry Head was present on behalf of the National Health Commissioners. The Italian Government also sent a representative.

The whole session was devoted to a series of discussions regarding the many nervous affections, organic and functional, produced by the war. Each discussion ended in the formulation of a number of practical conclusions. M. Pierre Marie emphasised the difficulty in determining what course to pursue in regard to soldiers wounded in the head who had suffered no grave injury of the brain. Many speakers pointed out that these men were "unstable," and might become a source of weakness at the front. Their memory was often weakened, especially for orders. They were liable to develop headache and become sleepless, also easily tired. The conclusion was that these men should be watched on duty for three months at least before returning to the firing line.

M. Pabinski showed some remarkable cases where a purely functional paralysis had led to changes in the tissues of the affected limb which could not be removed by suggestion. He earnestly implored that these patients should be sent in an early stage to the nearest neurological centre in order to give the best chance of a cure.

M. Vincent described from personal experience at the front the nervous conditions arising from the discharge of large quantities of high explosives.

All the questions discussed bore a direct relation to the war. Many members returned to their posts at the front on the close of the last sitting.

A Step Further.

WE have already drawn attention to the supervision of child activities generally practised in the New World. The clinical net is now to be cast wider to enclose the parents. There is nothing new in the inclusion of gross pathological antecedents, such as alcohol, insanity, or syphilis, but one is almost alarmed at the minute inquiry into the temperament and personality of forebears. Such common property as tendency to mental depression, supersensitiveness (so-called), or irritability, form links in a cumulative process which eventually terminates in the production of an obviously impossible individual—even the dementia praecox. The psycho-analyst appears satisfied, and there the matter would seem to end. What practical and prophylactic conclusions are to be drawn is not made very clear. Yet if the progressive danger in succeeding generations is really so great, one is tempted to think that in the case of temperamentally unstable individuals marriage should be discouraged. This cannot reasonably be done unless the growing practice of voluntarily seeking medical advice, prior to matrimony, becomes universal, and is to comprise also mental analysis by an expert. Finally, there is the extreme probabilty of disregard of professional recommendations. We are slow to disparage study

along these lines of supreme importance, yet it is possible that they are tending to partake rather of the nature of intellectual ends than of therapeutic means. Again, with these frailties so generally diffused, elimination of them from amongst us is a stupendous task. Moreover, some of the greatest and most useful figures in history were pronouncedly neurotic, and the secret probably lies in the judicious devising of means and channels whereby these aberrations find harmless or even useful expression.

The College of Nursing.

We are glad to see that the Society for State Registration of Trained Nurses has taken the step of appointing a Protection Sub-Committee to safeguard the rights and privileges at present enjoyed by certificated nurses as against the dangers threatened to the nursing profession by the proposed establishment of a College of Nursing. It is a misfortune that such a committee was not in existence two years ago. If it were, it might have been able to prevent some of the disasters that have come on the nursing profession since the beginning of the war. No one would have thought, however, two years ago that in a time of national demand for trained nursing, the authorities would have permitted trained nurses to be jostled out of their legitimate employment by the intrusion of a crowd of amateurs, and that the salaries of trained nurses should be depressed by the competition of untrained persons However, these things have come to pass, and they have been brought about mainly by the influence of a body whose head is the promoter of the College of Nursing. *Timeo Danaos et dona ferentes.* It will not add to the confidence of nurses in the proposed college that Mr. Arthur Stanley has stated that it is his wish that the Council of the College should supervise the education of "V.A.D.s."

Modern Treatment of Penetrating Chest Wounds.

Dr. Perreau, of Paris, has given his experience in the treatment of penetrating chest wounds. He states that in the course of seven months he treated 117 cases of chest wounds, 67 of which were penetrating. On account of the frequency of complications (embolism, pleural effusion, subcutaneous emphysema, broncho-penumonia, hæmorrhage of the lung) it is very important to apply as early as possible a form of treatment which will prevent these appearing, or at any rate considerably diminish their frequency. His treatment consists of *immediate*, *absolute* and *prolonged* immobilisation. During the first two days the patients were put on a purely water diet, and enjoined to avoid all movements and not to speak. From the third to the fourth day a more liberal diet was gradually allowed, the patients being spoon-fed by the orderlies. During the first four or five days Dr. Perreau injected every day 10cc. of camphorated oil.

Military Service and the Position of Chemists.

A census of the dispensing staffs of chemists and druggists is being taken throughout Scotland to enable the military authorities to judge how many, if any, men can be spared from present staffs for military service. Already the Glasgow census returns are in the hands of the Clerk to the Burgh Insurance Committee, and those of the Central District of Scotland are on the eve of completion. It is quite current talk that the chemists have gone to military service in very large numbers, and the fear is that the limit has already been reached; the number left are sufficient, and no more than sufficient, to look after the interests of the population at home. But the census will give figures which will help to clear up the point as to whether or not there is general scarcity or local scarcity of chemists, and proceedings can be taken if needed. The Pharmaceutical Society, with its strong element of business power, can be trusted to represent the position of their members with force and justice.

Mental Symptoms in Cerebro-Spinal Meningitis.

Drs. Eschbach and Lacane communicated to the Society of Medicine an account of two cases of cerebro-spinal meningitis which presented all the appearances of mental cases. The psychical symptoms due to the action of the meningeal infection on the cerebral cortex preceded the classic symptoms of meningitis. One case presented mental confusion and the other melancholic depression, and it is rather interesting to be able to assign to these mental states such a clear and precise organic cause as cerebro-spinal meningitis.

PERSONAL.

The King has been graciously pleased to appoint Charles Yelverton Pearson, Esq., M.D., F.R.C.S., to be one of His Majesty's Honorary Surgeons in Ireland, in the room of Sir Charles Bent Ball, Bart., M.D., deceased.

Sir Almroth Wright has been elected a foreign associate of the French Academy of Medicine.

Mr. Samuel Whitbread, M.P. Bedford, 1852-1895, left £2,500 each to the Bedford County Hospital and the Middlesex Hospital Ward for Cancer.

Dr. Barclay S. Baron, Lord Mayor, and Dr. Colston Wintle, Chairman of the Health Committee, have been placed on the Commission of the Peace for the city of Bristol.

Mr. S. H. Renshaw has intimated that he will give £2,000 to Bury Infirmary to endow two beds, one in memory of his wife and one in memory of his son, Lieutenant Alfred Renshaw, 5th Lancashire Fusiliers (T.F.), who was killed in action in the Dardanelles.

Dr. R. B. Mitchell, who has been Medical Superintendent of the Midlothian and Peebles Asylum since 1888, having retired on pension as from May 28th next, the District Board of Control at its last meeting resolved to place on record its appreciation of the excellent work he had done during his 28 years of service, and has appointed Dr. James H. C. Orr, at present his assistant, to succeed him.

The following gentlemen have consented to act as the consulting staff at the "Star and Garter" Home for totally disabled soldiers and sailors:—Consulting Physician, Sir David Ferrier, F.R.S.; Visiting Physician, Dr. S. A. Kinnier Wilson, M.D., F.R.C.P.; Consulting Surgeon, Mr. Wilfred Trotter, M.S., F.R.C.S.; Consulting Urologist, Mr. J. Thomson Walker, M.B., F.R.C.S.; Consulting Ophthalmic Surgeon, Dr. A. C. Hudson, M.D., F.R.C.S.; Honorary Dentist, Mr. Donald Campbell; Honorary Surgeon, Mr. Harry Wade, M.R.C.S., L.R.C.P.

CLINICAL LECTURE

ON

CANCER OF THE BREAST.

By G. P. NEWBOLT, F.R.C.S.Eng.,

Honorary Surgeon, Royal Southern Hospital; Lecturer and Examiner in Clinical Surgery, University of Liverpool.

IT is evident that the public do not yet realise the importance of early operation in cases of cancer of the breast, and for this they can hardly be blamed inasmuch as many medical men still give their patients bad advice in these cases. Quite recently I saw a lady with a lump in her breast which was of stony hardness and evidently malignant. She had consulted a doctor in town practice, five years before, when the lump first appeared, and his advice to her was that she need not trouble about it for ten years. I removed the growth together with the infected axillary glands, but how much better it would have been if the tumour had been removed when first it was noticed. A fortnight ago, I saw a woman upon whom an operation had been performed for cancer of the breast, and here the growth was recurring in the scar. In addition there were two nodules in the breast. In this case, a local removal had been done with dire result. The doctor, however, is not always to blame, as very often the patient cannot persuade herself to submit to the necessary mutilation. Of this, the following extract, taken from a doctor's letter, is an example. "Miss W. has had breast trouble, apparently, starting as a mastitis or innocent growth years ago. Now, however, it is malignant with enlarged glands in the axilla and it is developing into "cancer en cuirasse." Fifteen years ago, a lady asked me to remove a growth from her right breast, and as it was evidently malignant I advised complete removal of the growth and breast. To this she would not consent, and eventually I removed the tumour with a portion of the breast, thinking this was better than doing nothing at all. She remained well for ten years and then a growth appeared in her left breast which I removed, but it was of a cystic nature and growing rapidly so that the prognosis was bad. Now although one has seen some hundreds of cases of cancer of the breast in all stages in a certain number a correct diagnosis is impossible until the growth has been examined after removal. For example, six months ago, a single woman aged 30 consulted me about her breast, which was tender, indurated and enlarged. There was œdema and slight redness but no apparent reason for her getting an abscess. Her axillary glands were enlarged. She was taken into hospital and her breast was fomented for a week. As there was no improvement I made a section into the breast. It was not like a carcinoma on examination, but yellowish patches were dotted over the section and they closely resembled tubercle. I dissected out the axilla and removed the breast. The glands removed were large and adherent, and I felt sure that I was dealing with tubercle. Microscopically, the main growth was inflammatory, but at one spot cancer cells were present. At her age the combination of inflammatory trouble and cancer made the prognosis exceedingly unfavourable, and so it has turned out, for nodules have appeared in the scar, and the glands above the clavicle are becoming affected. Again, in cases of chronic interstitial mastitis it is impossible to say when the cancerous process supervenes. In one instance in which I removed the breast for this trouble, after numerous sections had been made a focus of malignancy was discovered.

It may be said that a fresh section at the time of operation will confirm the diagnosis, and the answer is: Yes, as a rule it does, but there are exceptions, and in either of the cases I have quoted the growth might easily have escaped observation during a hurried examination. One of the most difficult things to diagnose from cancer is a thick-walled cyst situated deeply in a well-developed breast. If it is absolutely necessary to make a diagnosis on the spot (and sometimes it is), an exploring trochar is the most certain method, for it is difficult, if not impossible, to get fluctuation in a cyst deeply imbedded in breast tissue. Another instance in which it behoves one to be wary is the cyst in a middle-aged woman, for its wall may be infiltrated with malignant disease of the worst type. Those I have seen have been in well-developed breasts in women otherwise healthy, and the disease in one case proved fatal in eighteen months after it was first noticed. Whenever there is any doubt, it is wise to cut into the growth at the time of operation, for one does not like to run the risk of removing a breast for a chronic abscess, and only the other day I opened in this way a small chronic abscess with a thick wall in the breast of a young unmarried woman. It closely resembled a solid growth, but it was slightly tender. How constantly women tell the surgeon that the tumour is not painful, and the popular superstition still exists that it cannot be cancer because it is not painful. In my experience, cancer of the breast is rarely painful. Retraction of the nipple is by no means always present, and in quite a number of cases I have pointed out to my house surgeons the absence of this symptom in fairly well advanced cases. Only to-day I demonstrated to some students a case in which the growth was the size of an orange, and yet the nipple was quite prominent, but in nearly all of these cases there was dimpling of the skin over the growth. Cases in which the breast is well developed and the growth small need very careful examination, or the growth may be overlooked. In these cases the proximity of the cancer to the pectoral fascia leads to an early infection of the axillary glands. In a group of five cases recently operated upon, in only one was there retraction of the nipple, in a second the nipple had never been prominent, and in the remaining three the nipple was normal, but in all five the skin was dimpled. The operation for removal of a cancer of the breast in skilled hands is practically without mortality, and as far as the operation itself goes is most satisfactory. The majority of the patients are able to get up at the end of a fortnight and speedily regain the use of their arms. The drainage of the axilla has revolutionised the operation, and with ordinary care primary union may always be expected. Of course, there are cases in which, owing to free-

removal of skin, some tension results, but this is usually to be avoided. The most important step is the careful dissection of the axilla. I usually content myself with the free removal of that portion of the pectoral muscle which lies under the breast itself, but sometimes remove all but the clavicular portion of the muscle. All vessels are picked up at once, and the denuded portion of the chest wall is covered with gauze dipped in warm saline solution. Directly the breast is removed the growth is carefully examined in order to estimate its extent, so that if necessary the adjacent structures may be more widely removed. Of course, a fresh knife and a change of gloves is essential. After operation, the arm is left as free as possible, and the patient encouraged to use it a few days later.

Are there cases which it is not wise to operate upon? Certainly there are. In cases now rarely seen in which ulceration is present with widely infected glands, the foul mass may be cleared, but only on the understanding that it is not a curative process, but carried out in order to make the patient more comfortable. The cases in which the skin is infiltrated "cancer en cuirasse" are hopeless and better left untouched. X-ray treatment will in many cases alleviate pain if present. In my opinion, where the supra-clavicular glands are involved the outlook is extremely grave; perhaps life may be prolonged by operation, but the prospect of cure is remote. Pain in the spine and in the hip should be carefully investigated, for it is useless to remove the breast when the patient has secondary deposits elsewhere. In those who die soon after operation for advanced disease in the breast, it is often mediastinal or lung trouble which proves fatal.

What is the prognosis in cases of cancer of the breast? This usually depends upon the stage at which removal is carried out, and also upon the age of the patient. There is no doubt in my mind that the prognosis in young and otherwise healthy people is very bad indeed, and one's best results are in women over fifty years of age. In male cases the outlook is extremely poor. If one gets the case early, and when the growth is the size of a hazel nut, or when one has to deal with a chronic mastitis becoming malignant, it is good. I remember the case of a lady operated upon in the year 1904 for a small growth on the inner side of the breast, in which there is no sign of recurrence so far. As the tumour progresses in size the glands become involved, and though one may clear the axilla, there is most probably extension to the glands above the clavicle or into the mediastinum. Many cases die some time after operation of mediastinal glandular infection. Another spot where secondary deposit appears is in the upper portion of the sternum, where a distinct prominence may form. The other breast not infrequently becomes involved, and I have recently amputated the left breast of a lady for cancer whose right breast I successfully removed six years ago for the same disease. The points one has to remember are early diagnosis by removal and examination of all breast tumours, and, if malignant, a wide removal of the growth and a careful dissection of the axilla. Albuminuria and sugar do not prevent this operation being successfully performed, and a good prognosis is probable in the majority of instances.

Dr. Arthur Richard Barnes, M.D., of Green Trees, Merstham, formerly of Boreham, near Hastings, left £17,436.

Mr. John Edwin Nixon, Senior Fellow of King's College, Cambridge, whose estate is valued at £13,940, bequeathed £100 each to King Edward VII. Hospital, Windsor, and Addenbrooke's Hospital, Cambridge.

ORIGINAL PAPERS.

SURGICAL "DON'TS."

(Third Series.)

By C. HAMILTON WHITEFORD, M.R.C.S., L.R.C.P.Lond.

Difficulty of Access to the Operation Area.

Of this there are two varieties:—

1. That peculiar to the particular operation. This is of relatively rare occurrence, and is unavoidable.

2. That due to the incision being either misplaced or insufficient in extent, or to a combination of these two factors. This variety is preventable. The difficulty is created by the operator.

Don't hamper the operation by inadequate or misplaced incisions, which needlessly prolong the operation and increase the risk of suppuration by traumatising the tissues. As a general rule, few patients are injured by liberal, properly placed, incisions.

Obsolete Methods and Post-Graduate Study.

Don't employ methods which are obsolete, always bearing in mind that change is not of necessity identical with progress. A method becomes out of date, not from mere lapse of time—some methods are as good to-day as when first brought out years ago—but as soon as there is devised a safer and better means of obtaining the desired result.

The surgeon can avoid out-of-date procedures only by keeping in touch with modern developments; and to do this, regular visits to progressive clinics are essential; reading alone is insufficient. Osler has summarised the matter thus: "A doctor without a post-graduate course, was stale in five years, in a rut in ten years, out of which only a prolonged course would remove him, and in twenty years in a well, out of which nothing would bring him."

The Anæsthetic.

Don't allow the patient to be anæsthetised with chloroform, the most lethal of the general anæsthetics in common use. The statement, "the patient cannot take ether," when closely investigated is not infrequently found to mean either that the anæsthetist cannot give ether or that the surgeon has not learned to operate on an etherised patient. In general surgery, nitrous oxide (or ethyl chloride) and ether given properly and preceded by atropine, either with or without morphia, is almost universally applicable. In the exceptional cases, where ether alone is undesirable, arrange with the anæsthetist for the use of a mixture of ether and chloroform, the less chloroform the better, and thereby avoid the deaths caused by undiluted chloroform.

The Material for Buried Ligatures and Sutures.

Do not bury unabsorbable material in tissues from which there is no natural outlet.

Intestinal sutures do not come under this heading, their natural exit being per rectum.

Remember that the epitaph of the buried unabsorbable ligature is "Resurgam," and use whenever practicable—which means in the vast majority of cases—absorbable ligatures, where necessary, hardened, to prevent their too rapid disintegration.

The Counting of Forceps and Swabs.

Don't forget, in every abdominal case, to have the forceps and swabs counted, both before and after operation. For the cocksure operator who "finds counting unnecessary because *he* never leaves anything in the abdomen," disillusionment is only a matter of time.

The belated discovery in the abdomen of a forceps or swab is liable to result in an action for damages, at the trial of which the position of the operator, who has to admit that the counting had been omitted, is far from enviable. Routine checking might with advantage be extended to all the smaller articles, such as needles.

The peritoneum is not the only hiding place for forceps and swabs. A pressure forceps has been removed from the axilla some weeks after a breast operation.

The possibility of such an occurrence can only be prevented by counting the instruments and swabs in every operation in which the wound is capable of harbouring them.

OSTEOMYELITIS

In operating on cases of acute osteomyelitis, especially in children, don't omit the tourniquet, which must be kept in position until the bone cavity has been packed and the dressings applied. The oozing from inflamed bone, laid widely open, is very free, and if not prevented by a tourniquet deprives the septic patient of a large amount of blood at the very time when he is least able to withstand such loss. Also the tourniquet, by preventing the necessity for constant swabbing, accelerates the operation. When plugging the bone cavity, don't forget to lubricate the plugging material with either sterile oil or sterile vaseline. Even with this precaution, the first dressing is far from being painless.

OVARIAN CYSTS.

Don't tap or incise ovarian cysts. Whenever practicable remove them intact through a large incision.

It is now recognised that many of these cysts, though innocent in appearance, are malignant, and not a few cases have occurred in which, after ovariotomy by a small incision and trocar, the patients have returned with generalised cancer of the peritoneum owing to infection by cyst contents during the operation.

There is also a possibility that the cyst, especially if adherent to intestine, may contain pyogenic bacteria.

ACUTE APPENDICITIS.

Don't, after definitely diagnosing an acute appendicitis, defer operation in order to wait for an improvement which may never occur.

Adopt the motto of John B. Murphy, "Now is the accepted time," operate at once, and, at the end of the operation, don't forget to insert a drainage tube.

APPENDICITIS—CHRONIC.

Many as are the ill-effects produced by a chronically inflamed appendix, don't diagnose chronic appendicitis in every patient who has at some time had slight discomfort in the right iliac fossa.

How many operators really believe that an appendix which is neither thickened, adherent, inflamed, nor distended is the cause of abdominal symptoms?

Such an appendix may fairly be regarded as harmless, even though it fails to conform to the standard of normality, which appears to vary according to the fancy of individual operators.

Given an appendix as harmless as that described, the operator will be well advised in hunting elsewhere for the cause of the symptoms.

Among the many excuses brought forward to explain the removal of an appendix are the following:—

1. The appendix is too long.

What is the correct length of an appendix, and what is to be done if it is too short?

2. The appendix is "kinked."

If by this it is meant that the appendix does not form a straight line, what appendix can hope to escape? If, on the other hand, it is implied that a bend in the appendix is causing obstruction of the lumen, such obstruction will be evidenced by either distension or thickening above the "kink." Here, as in other parts of the intestinal tract, a "kink" which produces neither hypertrophy nor distension may be disregarded.

3. The appendix contained a small amount of soft fæcal matter.

This is frequently found both *ante* and *post mortem* in appendices which have given no trouble.

4. The appendix was found to lie in the wrong position.

What is the correct position for an appendix, and is the appendix any the worse for running north-west instead of south-east?

5. There is nothing wrong with the appendix, but it is removed because it is useless and liable at any time to become inflamed.

In regard to the alleged absence of function, it is a remarkable theory that the decision as to removal of organs should depend on the operator's lack of physiological knowledge.

5. The practice of removing a healthy organ or tissue, in order to prevent possible degenerative changes in the part removed, is fundamentally unsound.

If the principle of removing healthy organs or tissues, on the off-chance that, if not removed, they may at some future date develop some disease, becomes generally accepted, there will be very little of the healthy human body which can hope to escape the attentions of the operator.

6. The appendix, to the naked eye, appears healthy, but the microscope may reveal something.

The microscope may, but that the revelation will explain the symptoms is quite another proposition.

Some years ago a French surgeon, after describing a hæmorrhagic form of chronic appendicitis, ventured to point out that this variety was only found in appendices to which clamps had been applied.

Operators who remove harmless appendices point triumphantly to the relief given to the patient as proof positive that the appendix was at fault. Such triumph is apt to be short-lived. The removal of a harmless appendix from a patient who is suffering from some disease other than appendicitis or who is merely neurasthenic, gives a temporary relief, not because a harmless organ has been taken out of the abdomen, but because the dread of appendicitis, not infrequently the result of the visit to the operator, has been removed from the patient's mind. Similar temporary relief might be obtained from an incision which stopped short of the peritoneum. Operations for neurasthenia are rarely, if ever, advisable. When, later on, the patient's symptoms recur, if no organic lesion can be discovered, the next stage is an operation for "adhesions," which, since they did not exist at the time of the first operation, can only be attributed to the operation for removal of the appendix. After several operations for "adhesions" have failed to cure, the patient may have some viscus fixed by sutures, or some larger operation, such as a colectomy may be performed

SECONDARY OPERATIONS ON NERVES.

Don't jump at the conclusion that the presence of a scar in the neighbourhood of a nerve, even

though accompanied by paralysis or anæsthesia, is an indication for immediate operation.

Many of these patients, when treated by relaxation of the paralysed muscles, combined with massage and electricity, make good recoveries.

It is time enough to consider the question of operation when the above methods have failed.

The operator who, without employing such preliminary treatment, performs operations for "nerve suture," is likely to have many operations for "neurolysis," which, under such circumstances, is a euphemistic expression of the fact that the nerve was found to be undivided. By employing appropriate treatment *after,* instead of prior to, "neurolysis," it is easy to obtain good results, many of which are wrongly attributed to the operation—wrongly attributed because many of these cases recover without operation, if properly treated.

(1st series of "Don'ts" appeared in the *General Practitioner,* January 1st, 1910.)
(2nd series of "Don'ts" appeared in The Medical Press and Circular, January 25th, 1913.)

OBESITY: EPILEPTIFORM ATTACKS: RECURRENT JAUNDICE IN A GIRL AGED THIRTEEN YEARS.

By E. G. FEARNSIDES, M.D., F.R.C.P.,
Assistant Physician to the Hospital for Epilepsy and Paralysis, Maida Vale.

E. C—, female, born November, 1901. There is no family history of neuropathy or obesity, and her parents, who married in 1894, are healthy and rather below the average in size and weight. The patient is the second of two children, and her brother, born in 1896, is healthy.*

Personal History.—At birth she was a fine baby, and since the age of seven has always been "too large for her age." Her only illnesses have been measles at the age of three, mumps at the age of five, and whooping cough at the age of seven. At the age of nine, after a fall down some steps, in which she hurt her head, her weight began to increase rapidly. Since April, 1913, she had been "subject to fits," and in April and November, 1913, and on January the 18th, March the 30th, and April the 20th, 1915, suffered from typical epileptiform convulsions. The attack of March the 30th occurred whilst the patient was under observation in hospital. In each attack she had been convulsed, lost consciousness, become cyanosed; on three occasions she has bitten her tongue, and on one has fallen and cut her cheek. The attacks are followed by drowsiness and intense frontal headache, and on two occasions have led to vomiting. After each attack, for a day or more she has been irritable and excitable. She has always been backward at school, and when she left school in April, 1913, had only reached Standard IV. Since the onset of the attacks her memory had become defective, and she is "no longer the bright girl she was." Catamenia began in May, 1914, and occurred regularly in June, July, August and September, 1914, and again in March and April, 1915; on the last two occasions the loss was excessive and continued for seven days. From time to time since February, 1915, she has "gone yellow," and since this date definite bilious staining of the eyes has been observed on several occasions. On March the 5th she was definitely jaundiced, and bile was present in the urine in large quantities, but at no time has she complained of abdominal pain or exhibited any abnormal abdominal signs. Her weight on February the 5th was 11 st. 13 lb., and by February the 19th had increased to 12 st. 2 lb.; since this time she has been taking thyroid extract (2½ gr. daily), and her weight has fallen to 11 st. 3 lb.

The patient is an extremely stout, thickly-set girl. The skin is moist and everywhere stained a light brown colour. The mucous membranes appear healthy. There is a well-developed pad over the lower cervical spinous processess and small supra-clavicular pads, but on the whole the excess of fat is distributed over parts which about the time of puberty in girls usually show a superabundance of fat. Over the lower parts of the abdomen and upper parts of the thighs well-marked striæ of a white or pink colour are present. The veins over the lower abdomen are prominent. The axillary and pubic hair is well developed and that of the scalp normal. The breasts are large and well developed. The thyroid is small. The bones of the head, trunk and limbs appear normal, and there is no evidence of any delayed union of the epiphyses. A skiagram of the skull taken in February, 1915, shows a clear-cut sella turcica of normal outline and dimensions. She is not anæmic, and a blood-count shows red cells 5,600,000 per cubic millimetre, hæmoglobin 106 per cent., and 17,500 white cells per cubic millimetre, with a normal differential count. The voice is natural.

The cardiac sounds are clear. The blood-pressure in the right brachial artery measures 125 mm. of mercury. No abnormal signs are present in the lungs. The liver and spleen cannot be felt, and to percussion are not enlarged. No abnormal lumps can be felt in the abdomen. The urine contains neither albumin nor sugar; the average quantity passed in twenty-four hours is 36 oz.

Mentally she is dull and slow. She sleeps heavily and is not troubled with dreams. Apart from the epileptiform attacks she suffers but little from headache. There is no pressure tenderness of the scalp. Vision is unimpaired and the optic discs appear healthy. Smell, taste and hearing are unaffected. Ocular movements are well carried out, and there is no nystagmus. The pupils react normally to light and accommodation. The functions of the other cranial nerves are performed normally. The knee-jerks and ankle-jerks are brisk, and the abdominal reflexes readily obtained. Both plantar reflexes give a flexor response. The movements of the spine are normal and the action of the sphincters controlled.

Progress.—Between May the 13th and November the 5th, 1915, she has taken daily 30 gr. each of the bromides of potassium, sodium and ammonium, and 2½ gr. of thyroid extract, and during this period her general health has been fairly good. There have been no further attacks of jaundice, but she has suffered from generalised epileptiform attacks on August the 18th, October the 8th, and on October the 9th, and, apart from the attacks, has complained on several occasions of severe generalised headache lasting for a day at a time. Her weight has gradually increased to 12 st. 11 lb. The catamenia have been irregular and on two occasions have lasted for twenty days continuously. The excess of fat and its distribution have altered little, and the description of the patient and her nervous signs written in May, 1915, is still applicable. Mr. G. W. Thompson reports that the condition of the optic fundi has not altered, and Dr. Gilbert Scott finds that between February and November, 1915, no changes in the outlines of the sella turcica, as seen in the radiogram, have appeared.

Comments.—Obesity in young girls at and about the time of puberty is a normal phenomenon, but as to the factors at work in its causation little is known. In recent times, with the gradual increase in knowledge of some of the functions of the endo-

* The case was shown at the Neurological Section of the Royal Society of Medicine, on May 13th, 1915.

crinic system of glands, much speculation, based on slender foundation in fact and few adequate observations, has been published tending to incriminate alterations in the functions of the thyroid, the pituitary, the pineal, the adrenal, and gonadic glands, and the interrelations of these, as the underlying factors in its causation. At puberty it is known that this system bursts forth into enormous activity. Is this girl an example of a rather severe obesity of the type which falls into Sir James Goodhart's class of "normal abnormalities"?

The association of obesity with epileptiform convulsions would seem to imply that both may have a single cause. Can this lie in the pituitary body or pineal gland? The distribution of the fat conforms more closely to the distribution seen in normal girls rather than that which is found in examples of dystrophia adiposo-genitalis due to sub-pituitarism, and, moreover, in this case secondary sexual characters in the hair and breast are present, and menstruation, though irregular, occurs periodically. By our usual criteria no evidence of pituitary involvement can be demonstrated, and as far as I know pineal disease has never been associated with obesity.

Hypernephroma often occurs with precocious sexual or physical development and hirsuties, and is associated with obesity; in these patients the fat is distributed in a manner which recalls the obesity of an oldish man of alcoholic habit. The recurrent attacks of jaundice suggest the possibility of abdominal disease, but here again investigations of the abdomen and of the functions of the liver and pancreas have so far proved negative. At the present time no definite diagnosis can be made. The case has been reported in order to stimulate the collection of observations which may enable us to gain further insight into the causes of obesity in young people, a subject upon which the gaps in our knowledge are still so large.

OXYGEN AND CANCER.

By LIONEL CRESSWELL,
Burley-in-Wharfedale.

PART II.

THE considerations subsequently set forth by Binz are of much importance in their bearing on the causation of cancer. He continues: "We may now pass on to consider one action of arsenic which has a special bearing on its therapeutic application. I refer to the increased *development of the animal tissues* which results from its cautious use. (11)

"In those countries where arsenic occurs native, as a mineral in the form of sulphides, and is consequently easily obtained, it seems to have been known from an early period that horses looked better and displayed greater activity if arsenic were added—in carefully adjusted quantities—to their food. The people themselves also took it, and consequently in these districts habitual arsenic eaters are to be found, who systematically use the poison for the same purpose. Certain accounts from Styria were published, and were received with some incredulity at first. . . . . The government authorities then requested the Styrian doctors to furnish accurate reports on the matter, and the above mentioned statements were entirely corroborated.

"The arsenic eaters are met with chiefly in the north and north-west of Styria. . . . Arsenic eaters are sometimes though rarely found amongst women. . . . For the present it is impossible to explain how the system becomes accustomed to strong poisons, though the fact is daily observed with regard to nicotine and morphine. A conceivable explanation may be furnished by the changes in the amount of oxygen in the cellular protoplasm which are induced by the action of arsenic; we can at least imagine that the organism gradually adapts itself to the increased activity of an element—namely oxygen—for which it has a close affinity.

"As far back as 1863, it was reported that two young rabbits, to each of which (arsenic) was daily given in its food became very lively . . . and grew to an extraordinary size.

"Numerous experiments were made by Geiss on rabbits, fowls and young pigs; he obtained most surprising results. . . . The bones of those animals to which arsenic was administered can be distinguished at a glance from those of the control animals. The offspring of a mother to whom arsenic has been given all died at birth, apparently because they were too large. . . . Consequently, in this case also, the arsenious acid acted as a stimulus to the development of tissues. The condition of the individual bones was essentially the same as that produced by Wegner from the administration of phosphorus. More recent observations furnish results closely agreeing with the above and lead to the following conclusions:

"Small doses of arsenic cause proliferation of the cells of the liver and kidneys. In animals, small doses of phosphorus act on the liver in precisely the same way as arsenic—that is to say they stimulate the growth of the various cells, larger doses give rise to fatty and vacuolar degeneration and destruction of the liver cells. Neither the blood nor the vascular system is affected. (12)

"Phosphorus and arsenic, moreover, do not induce these morbid changes by acting to any extent on the structures surrounding the cells—that is to say, by lessening any external resistance to the development of the cells themselves. *At the same time mitotic or indirect division of the nuclei is distinctly manifest.*"

Elsewhere, discussing the therapeutics of phosphorus, Binz says: "The fatty degeneration appears, therefore, to depend altogether on the direct contact of the phosphorus with the living protoplasm. Other chemical bodies which have strong oxidising or reducing action also induce fatty degeneration of the cells, and paralysis of their special functions. *Everything which contains oxygen in an active form or which can cause it to become active—and phosphorus is a body of this nature—will produce these changes very rapidly.*" The italics are mine.

Binz continues:

"I have here a large glass jar which contains a little water. In this is placed, but not entirely submerged, a stick of yellow phosphorus. The jar and its contents have been in a warm room for several hours. If now, I dip a broad piece of filtering-paper moistened with mucilage of starch containing potassium iodide, into the jar, the paper immediately turns blue, for the air in the jar contains ozone, by which the potassium iodide is decomposed in the usual manner. The formation of the ozone may be represented by the following equation:

$$2P + 3O_2 = P_2O_3 + 3O.$$

the phosphorus anhydride P_2O_3 continuing with

the water, and remaining in solution as phosphorous acid $P_2O_3 + 3H_2O = 2H_3PO_3$.

"There is no manifest reason why phosphorus, when it has been introduced into the circulation, should not be transformed in a similar way, by the oxygen of the hæmoglobin.

"It is immaterial whether, in these changes, we regard the active atom of oxygen in ozone as a strong oxidising or as a powerful reducing agent; as is well know, ozone can, according to circumstances, act in either way. Neither does it matter if we attribute the changes to the intermediate formation and rapid oxidation of phosphoretted hydrogen, the action of which is said to be very similar to that of finely divided phosphorus. The mode of action may vary in some details, but the conclusion to which I have arrived is, that the changes in the system produced by phosphorus result from the development of active oxygen through the agency of that substance."

"We have further to notice that the oxides of phosphorus are either not poisonous, or if they are, the effects they produce differ both as to their nature and intensity from those of phosphorus itself.

"*If this unusual liberation of oxygen within the cells which is antecedent to its being transformed into the active state, takes place slowly, it then acts as a formative force, and so may promote cellular growth*; if, however, it occurs in too large a quantity, or continues for too long a time, it acts as a disintegrating force which endangers the structure of the cell and therewith its vital activity." Again the italics are mine.

"The explanation I have here offered is, at all events, not a strained or improbable one, it is based on facts, and also explains the individual facts, and it may be allowed to stand until a better has been offered." (13)

Much more that Binz has recorded concerning his investigations in relation to the pharmacological and toxicological properties and effects of phosphorus, arsenic, bismuth, lead, silver, mercury, permanganate of potash, chloride of lime, chlorate of potassium and animal and vegetable charcoal might be quoted by me in additional support of my oxygen hypothesis of cancer causation. For the purposes of this essay I need cite no more, but proceed to point out the bearing of what is cited on my theory.

Over and over again it has been proved that protoplasm possesses marked reducing properties, that is to say it has such a great affinity for oxygen, that possibly it can take it direct and greedily from the air as some say, but at any rate that it can often do so when there is a third substance present. In the living forms of anaerobes it can extract it from substances like sugar in which it is in chemical combination. Binz's experiments prove that it can separate it from arsenic, phosphorus, nitrogen and other metals and halogens, *and that it is the oxygen—nascent active atomic—or whatever else you like to call it that is the formative, destructive, preservative, antiseptic or poisonous element according to the strength of the dose and action or way it is viewed.* Oxygen, is short, may be the means of life or the means of death to any living organism with which it comes in contact. If the transformation into the active state and transference to the living cell takes place minutely and slowly, it acts as a formative force. If the transformation occurs in too large a quantity or the transference continues for too long a time, oxygen acts as a disintegrating force endangering the structure of the cell and its vital activity. Vitally necessary as oxygen is to the living organism, the mechanism by which its absorption takes place is so rigid and inelastic that when anything gets out of gear or breaks down it is impossible to replace it by any other means. Were the mechanism less rigid and inelastic the being would be in danger of over-oxidation, that is of self-combustion. It is this rigidity and inelasticity that I conceive leads to the onset of cancer. From one or another cause, constitutional, temporal (senility) or accidental, the whole system, or the part affected by the disease falls into a condition of cellular oxygen hunger. The individual cells are, to employ a familiar illustration, in the unhappy predicament of the prisoners in the infamous Black Hole of Calcutta, which had only one small window—more numerous than the supply of oxygen is sufficient for. In the struggle for existence those nearest any supply of oxygen, like the twenty-three of the hundred and forty-six unfortunates who came out alive from that ghastly June night in 1756, survive at the expense of their fellows. In the case of arsenic cancer, as in that of sweeps' cancer, when from any cause exposure of the oxygen-hungry cell-protoplasm to arsenic or soot takes place, passage of oxygen results. This passage may at first be so violent, that simultaneous reducing and oxidising processes may occur on either side to the destruction of the cells immediately implicated. But there comes a point where some cell or other, (14) more or less removed from immediate contact with the oxygen supplying or nutrient substance, experiences only its restorative and not its destructive force. From protoplasmic restoration to protoplasmic formation and growth is a single step. And from growth to cell division and proliferation is only another.

Sir Alfred Pearce Gould (15) says, "The cancer cell is only a variation of a normal cell . . . it possesses neither in structure nor powers anything not found in the healthy cell. Let me rapidly mention the established facts about the living cancer cell. First, it possesses a great power of continuous multiplication. . . . The second characteristic is that it retains the inherited limitations to type of the cells among which it first appears. . . . Thirdly, cancer cells develop and differentiate but little and irregularly. . . . The development of the cancer cell is neither purposeful nor effective. . . . Cancer cells exhibit periodicity in their growth." And Roger Williams (16) says, "as E. B. Wilson, the chief exponent of modern cytological knowledge for English-speaking people, has so well said in the latest edition of his useful book (17): 'All the facts at our command indicate that the tissue cell possesses the same morphological organisation as the egg cell or the protozoan, and the same fundamental physiological properties as well.'" There can be no doubt, as Spencer and Darwin surmised, that the fundamental properties of somatic and germ cells are the same in kind and that they differ only in degree.

An embryo and a cancer have much in common. The difference between them is that one is a sexual and orderly manifestation of reproduction in the parent body, the other is an asexual and disorderly growth. Geiss tells us of the surprising results

he obtained by the administration of small doses of arsenic on rabbits, fowls and young pigs. The offspring of a mother to whom arsenic had been given all died at birth, apparently because they were too large. Zeigler and Oblensky's experiments furnish similar results. Small doses of arsenic caused proliferation of the cells of the liver and kidneys, not by acting to any extent on the structures surrounding the cells—that is to say by lessening any external resistance to the development of the cells, but by acting chiefly on the cells themselves. *At the same time mitotic or indirect division of the nuclei was distinctly manifest.* This latter is an especially interesting observation of Binz, inasmuch as Ross (18) recording his experiments in the excitation of leucocytes by means of certain alkaloids states, that he and his co-worker Cropper observed certain excited movements of a similar form to be caused by arsenic, but that when the effects of oxygen were tried on leucocytes by bubbling the gas through the jelly the action seemed to be negative. Herein is exhibited the difference in action between quiescent molecular oxygen and the active atomic form postulated by Binz in the case of arsenic poisoning and cell-proliferation, and by myself in the case of cancer causation. Once the morbid process of cancer growth has begun, it continues at the expense of the whole system even after the original stimulus has ceased. The re-invigorated proliferating cells flourish parasitically at the expense of neighbour cells, their imperative oxygen demand leading in some cases to very severe cachexia.

"There are indications," say Adami and McCrae, "that the actively growing carcinoma cells feed upon the pre-existing tissues, and apparently by phagocytosis, by extra-cellular ferments and by preparatory solution, the tumour cells replace the tissue cells and use them as food stuffs." "The growth of the cancerous mass and its suicidal infoldings by pressure on surrounding parts tend to constrict blood vessels, causing central degenerative changes. This can be readily understood, since the outermost cells obtain the best of the oxygen and food supply, while the inner ones are deprived of these and also of a free outlet for their own end-products. The degenerative changes are atrophic or necrotic or at times autolytic so that the centre part of the tumour may become fluid. Similarly in a surface tumour the most superficial cells are farthest from the blood supply and are, therefore, liable to necrosis." (19)

Those who are interested in the problem of the cause of cancer may consult my essay in *The Nineteenth Century* for other considerations. From among them I may recite the frequently expressed opinions of great authority; (1) that any parasitic theory of cancer fails even to be a satisfactory working hypothesis; (20) (2) that the probability, almost the certainty, is that cancer has one scientific cause acting under a great variety of conditions, and (3) that some day a simple therapeutic agent of universal potency in the animal creation would perhaps be discovered, one which would be found to have a profound influence on the causation, growth and arrest of the cancerous process. To apply the words of Binz, the oxygen hypothesis I have offered is at all events not a strained or improbable one. It is based on facts and also explains the individual facts and none other fulfilling these conditions has been offered before. My path is not "a mere airy track, fabricated of ideal cobwebs, but a solid and broad bridge of facts." Mere speculation has no part in it. My starting point was a thorough study of all the available literature on malignant disease, a careful regard to the recorded facts and ascertained factors. In the midst of all the welter of literature and statistics, records of experiments, theories of causation (over 2,000 in number) the one striking fact of "the *enormous susceptibility of chimney sweeps which is too great to be explained by chance,*" as the author of the article "Cancer" in the tenth edition of the *Encyclopædia Britannica* puts it, together with his concluding pregnant suggestion that "*no doubt the case of the chimney sweep contains one of the keys to the problem of cancer causation*" *arrested and focussed my attention.* From general knowledge of the nature and properties of amorphous carbon of which soot is a form, the question was aroused in my mind whether the influence of oxygen as a factor in the causation of the disease had been fully *considered from all points of view.* As I moved forward in systematic study of the literature of cancer, the more I became impressed with the absence of such consideration. It is difficult to believe that a false hypothesis would explain so many classes of facts as mine does. As Darwin said in a letter to Dr. Asa Gray, "an hypothesis is developed into a theory solely by explaining an ample lot of facts."

REFERENCES.

(11) I should like here, in passing, to refer to the interesting experimental work showing proportional relations between the development of yeast cells and the quantitative supplies of oxygen set forth in "Some Studies in Yeast" (Annals of Botany, 1914), by Horace T. Brown, L.L.D., F.R.S.

(12) "As a first result the workers (engaged in the handling and manufacture of the oxide and soluble salts of arsenic) have a tendency to develop an artificial stoutness, but . . . finally develop skin rashes and sores, especially in the armpits, genitals and wherever the skin creases hold the dust." "Occupational Affections of the Skin." R. Prosser White, M.D., M.R.C.S., &c.

(13) "Lectures on Pharmacology." Binz. P. 67-69.

(14) Roger Williams says (p. 400):—"The initial lesion of cancer is generally solitary and so exceedingly minute that its original germ is probably but a single one of the constituent cells of the matrix or a small cellular group."

(15) "Bradshaw Lecture on Cancer (1910)."

(16) "Natural History of Cancer." W. Roger Williams, F.R.C.S. p. 213.

(17) "The Cell in Development," &c. (1911), p. 291.

(18) "Induced Cell Reproduction and Cancer" (1910). By Hugh Campbell Ross, M.R.C.S. (Eng.), L.R.C.P. (Lond.), Director of Special Researches at the Royal Southern Hospital, Liverpool, and John Westray Cropper, M.B., M.Sc. (Liv.), M.R.C.S. (Eng.), L.R.C.P. (Lond.), &c., &c., p. 112.

(19) "Text Book of Pathology." Adami and McCrae (1914).

(20) The hunt for "cancer parasites" has rightly been stigmatised by Schaudinn, as one of the most melancholy chapters in biological investigation. "Natural History of Cancer." Roger Williams (1908) p. 233.

CLINICAL RECORDS.

A NOTE ON COMMOTIO CEREBRI, OR SHELL SHOCK.

BY J. C. McWALTER, M.D., F.R.F.P. AND S.,
Of the R.A.M.C.

OPINIONS on "shell shock" oscillate between extreme limits. In the earlier days of the war a medical officer who dealt with the question in his thesis for the M.D. degree of Trinity College, came to the conclusion that there simply was not any. On the other hand, Dr. Mott and his colleagues at the Royal Society of Medicine have been horrifying us with the list of complaints, from gibbering idiocy through deaf mutism, blindness, deafness, spinal and nervous disintegration, spine shock, nerve shock with neurasthenia, to mental breakdown, which mark the subsequent path of

the soldier who has been subjected to injury as a consequence of shell warfare.

Nobody doubts that Dr. Mott is nearer the truth. All of us who have come into professional contact with sick or wounded soldiers from the front have been struck by the overpowering importance of the nervous or physical elements of their disorder—of a profound *commotio cerebri* or *commotio nervorum*, which so altered the nervous outfit and outlook of the soldier as to make him a new, and generally a much less useful and less admirable man.

The species of "shell shock" to which I wish to draw attention is a much less dramatic type of case than that spoken of by Dr. Mott and his colleagues. It is a species of nervous instability, apparently a molecular instability of the cerebral cells, which may not be marked by any definite physical signs until the soldier is subjected to some slight extra strain, as of heat, or hunger, or travel, and which then manifests itself by a sudden breakdown, a complete collapse, bearing all the classical signs of compression of the brain with insensibility.

This is the kind of case I refer to: The city ambulance brought to the hospital a soldier who had been picked up quite insensible in the public street. He was absolutely unconscious, with slow, stertorous breathing, dilated pupils, flaccid in his limbs, unresponsive to any ordinary stimulus. There was no sign of any injury to account for his condition, and no evidence of alcoholism.

He was left in bed for some hours, the usual means to bring back consciousness being applied in vain. The pulse got slower, the respiration more sighing, the force of the heart-beat more diffused and laboured. He presented the very picture of dissolution.

Towards evening, about eight hours after he was brought in, he moved his eyelids and his lips. Being asked his name, he muttered some response. About ten hours after the stertorous respiration became modified, and the couple of drops of croton oil which he had been given operated. Finally a natural sleep supervened, out of which he could be awakened 18 hours after the onset of unconsciousness. In a few days after he was fairly well, but dazed and confused.

He had never received any definite injury except the constant shocks from the bursting of shells and the scattering of shrapnel. Such a man, however, must always be liable to the like attack of *commotio cerebri* on being faced with any great strain or excitement. It is scarcely fair or wise to send them back to the trenches, and yet, in the absence of definite physical stigmata of disease one can scarcely certify them as unfit.

Age and temperament are perhaps the determining factors. This man was bright, cheery, rather young, and anxious to get back. Those verging on forty get depressed, lachrymose, gloomy, and generally unfit for further strain.

If, the war being over, such a man, in the course of his civil occupation, developed the like symptoms with a fatal result, would his death be the direct consequence of the War Expedition? I submit that it would. There is a great responsibility on medical officers who are asked to state whether a patient's condition is due to the effects of the campaign, to take every care of the patient's interests as well as those of the Government, for one may easily do a man who has sacrificed much for his country irreparable harm if one lightly asserts that his broken health is not due to his Army services.

The Portuguese Red Cross Society at Lourenço Marques is organising ambulances for service in Nyasaland.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE ULTRA-VIOLET RAYS OF THE SIMPSON LAMP.

To the Editor of The Medical Press and Circular.

Sir,—In your issue of April 5th a paragraph suggests a commission of inquiry as to the origin and effects of the so-called Simpson or "S-rays." In January last, at the Electro-therapeutic Section of the Royal Society of Medicine, evidence was given by physicians of repute who had carefully investigated the physical and therapeutic properties of the Simpson apparatus. It was conclusively shown that it gave out ultra-violet rays in greater abundance than the Finsen lamp, and in about the same quantity as tungsten electrodes. Hence there is in this much-advertised lamp no new discovery of new rays, as was the case with the X-ray, but only a new source of already well-known rays. For this reason it is inaccurate to speak of "Simpson rays," or "S-rays"; the only accurate descriptive title is the Simpson lamp for producing ultra-violet rays. Evidence as to the value of this lamp was also brought forward, and it was clearly shown that no one who was unfamiliar with the effects of other methods for producing heat and light could possibly judge as to the comparative effects of the new lamp. Dr. Sequeira proved that its rays could not penetrate a thin cotton thread, much less the human skin. The superficial effects of the lamp have yet to be proved superior to those obtained from other sources of ultra-violet radiation. In the interests of the public and the profession misled by advertisements, it is time these facts were widely known.

I am, Sir, yours truly,

Agnes Savill, M.D.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Section of Psychiatry.

Meeting of the Section held on March 28th, 1916.

The President, Dr. F. W. Mott, F.R.S. in the Chair.

Dr. Bernard Hart read a paper entitled

THE PSYCHOLOGY OF RUMOUR.

Rumour he defined provisionally as the transmission of a report through a succession of individuals, the product of the narratives of a series of witnesses. The reliability of a rumour depended on the accuracy with which such statements were transmitted, and, ultimately, upon the accuracy of the report furnished by the first member of the series, who was assumed to have seen or heard the occurrence itself. The report furnished by the actual witness of an event constituted "evidence" in the legal sense of the term, and it was clear that an investigation of its psychology must logically precede that of rumour. In former days the criterion of reliability was held to be the moral character of the witness. The question debated at that period was whether a witness was honest or dishonest, or whether he was trying to mislead, with definite conscious ends in view. If such scrutiny resulted in the individual's favour, all his evidence was accepted. Nowadays, however, the

realiability of each individual statement was separately estimated, each possible influencing factor being taken cognisance of, including the unconscious action of political and other bias. Extensive experimental investigations into the psychology of evidence had been carried out, especially by Stern and his school. The method adopted generally consisted of submitting a predetermined experience to a number of subjects, who were subsequently required to furnish a report of their experience. These reports were compared with the original experience, and the various results in that way evaluated.

Two methods of obtaining the report were employed: the narrative and the interrogatory (cross-examination). These experimental investigations completely upset the naïve views still generally held by the laity—namely, that evidence given with the best knowledge and interest was a correct reproduction of actuality; and, secondly, that evidence which was false must be due to either lying or culpable carelessness. Completely correct reports were not the rule, but the exception. One investigator found, in 240 reports, only 2 per cent. of errorless narratives. The average reporter, when no suggestive or leading questions were employed, exhibited a co-efficient of accuracy of only 75 per cent. Attestation was not found to be a guarantee of accuracy, for even in sworn testimony 10 per cent. of errors were found to be present. On increasing the time-interval between the event and the report, it was found that though range and accuracy were both diminished, the degree of assurance of the reporter showed a surprising constancy. Hence a person's degree of assurance and readiness to swear to the truth of his testimony depended on the character of the person rather than upon the quality of his memory. Evidence given by children should be accepted with the greatest caution, for the assurance of children was relatively high, while their capacity for reproducing what they had seen was very low.

After a historical *résumé* of the work of previous investigators, Dr. Hart proceeded to analyse the psychological factors leading to the perversion of evidence, dividing the processes involved into perception, conservation and reproduction, and especially dwelling upon the part played by "complexes" in the distortions affecting each of these processes. The facts of pathology were of great help, and a consideration of hallucinations, illusions, the paramnesias of alcoholics and paralytics, and particularly of the condition known as pseudologia phantastica, showed precisely the same causes at work as in the perverted evidence of the normal man, but, of course, in a more exaggerated degree. The action of phantasy was of the greatest importance, both in pathological conditions, such as hysteria, and in the production of certain rumours in normal men.

The author passed on to consider rumour as a social phenomenon, and analysed its relation to the psychology of the crowd. The views of le Bon, Conway and Trotter were described and criticised. The peculiar susceptibility of the crowd to the action of "herd instinct" explained the ease with which non-rational opinions and beliefs were embraced by it, and hence its increased liability to the acceptance and propagation of rumours. During a great war, herd instinct was stimulated to a maximum degree, and the prevalence and vitality of rumour were, for the same reason as in the case of the crowd, also greatly enhanced.

Dr. Hart concluded by enumerating and classifying the various types of rumours, analysing the factors responsible for their origin, and illustrating his contentions by examples drawn from recent history.

The ensuing discussion was participated in by the President, Sir George Savage, Mr. J. C. Flugel, Professor H. W. Carr, Dr. W. H. B. Stoddart, Dr. Percy Dunn, Dr. Ernest Jones, and Mr. J. Herbert Parsons. The author briefly replied.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Medicine.

Meeting held Friday, March 3rd, 1916.

Sir John W. Moore in the Chair.

soya bean (glycine hispida) and its uses in physiology and medicine.

Dr. Walter Smith read a paper on above.

Attention was drawn to its important dietetic and economic applications, which admitted of considerable extensions, if its cultivation were extended in our colonies, especially in South Africa. The seeds are free from starch and sugar, and had been utilised in the treatment of diabetes. Takeuchi, a Japanese savant, discovered that the bean contained a specific ferment, urease, which rapidly converted urea into ammonium carbonate. The general principles of enzyme action were briefly mentioned, and the modes whereby they operate. The relations of ordinary urea to ammonium cyanate and of sulphur urea (thio-urea) were discussed, and the mutual reversibility of the process in each case was experimentally shown. The almost immediate influence of urease in converting urea into ammonium carbonate was demonstrated, and it was pointed out that urea had recently been discovered in a number of plants, up to as much as 3.5 per cent. in a fungus. A practical point in connection with urease was its application to the quantitative estimation of urea.

Dr. Kirkpatrick asked whether the estimation of urea could be carried out in clinical work, or must the urea be in a pure state.

Dr. Parsons referred to the almost invariable presence of starch in so-called "diabetic foods"—he had once found as much as 60 per cent.—and thought soya bean might prove very useful in this respect. He was very glad to hear of this method of estimating urea, as he had found the hypobromite method unreliable. He would like to know how urease was prepared commercially, and where it could be obtained.

Mr. Craig said that soya bean had been in use as a cattle food for some time. In some cases cattle had died in a rather mysterious way, and he would like to know whether urease could act on any other nitrogenous substance.

Dr. W. G. Smith, in reply, said that the estimation of urea by urease was quite applicable to clinical work, and was, in fact, a very simple and easy method. In the case of cattle urine an estimation was afforded of the allantoin nitrogen also.

Miss Elizabeth Weir, of Edinburgh, left personal estate in the United Kingdom valued at £68,260, of which £48,496 is Scottish estate. The testatrix left, among other bequests: £5,000 to the Royal Infirmary, Edinburgh; £1,000 each to the Royal Edinburgh Hospital for Incurables, the Royal Victoria Hospital for Consumption, and £500 to the Royal Edinburgh Hospital for Consumption.

Mr. Thomas James Carless, Richmond, left £100 each to the Royal Hospital, Richmond, and King's College Hospital, and £300 to the Medical Mission Auxiliary Church Missionary Society for endowing a bed at Kirman, Persia, to be called the "Henry Carless Bed."

OBITUARY.

SIR THOMAS B. CROSBY, M.D., F.R.C.S., LL.D., LONDON.

Alderman Sir Thomas Boor Crosby, M.D., who was the first doctor to serve the office of Lord Mayor of London, died on April 6th at his residence in Gordon Square.

He was born in 1830, at Gosberton, in Lincolnshire, where his father was a farmer. He was educated at a local grammar school and at University College, London. After his medical training at St. Thomas's Hospital, he qualified M.R.C.S., L.S.A. in 1852. In 1860 he became F.R.C.S. and two years later took the M.D. St. Andrews. For over 30 years Sir Thomas carried on an uneventful professional career in the City, in the course of which, in 1871, he filled the presidency of the Hunterian Society.

It was not until 1877 that he took any part or interest in municipal affairs, and this came about by chance. Happening to be present at a by-election for the Court of Common Council in the Ward of Langbourn, where he was an elector, he was persuaded to become a candidate, which he only consented to do on the understanding that if his seat were wanted later on by a better man he would retire. He was annually re-elected year after year until 1898, when he was unanimously elected to the Court of Aldermen.

In 1911, being then 81 years of age, he was elected Lord Mayor of London. He had at first offered, in consideration of his great age, to give way to any of his younger colleagues who might be anxious to become Chief Magistrate, but none took advantage of the proposal, and there was on the part of the medical profession a great desire that one of their number should, for the first time, fill the Mayoralty of the City. On leaving the Mansion House, Sir Thomas resumed his professional duties, and attended to his practice till stricken down by his fatal illness a few days ago.

SIR ALEXANDER R. SIMPSON, M.D., D.Sc., F.R.C.P., LL.D., EDINBURGH.

We regret to record the death of Sir Alexander R. Simpson, formerly Dean of the Faculty of Medicine, Edinburgh University. On April 6th he was knocked down by a motor-car near his residence in Queen Street, Edinburgh, and died shortly afterwards from his injuries.

Alexander Russell Simpson was born in Bathgate, West Lothian, in 1835. He was the second son of Mr. Alexander Simpson, and married a daughter of Mr. Freeland Barbour, of Bonskeid and Gryffe Castle. He received his early education at Edinburgh University, where he was apprenticed to that distinguished man of science, Professor John Goodsir. As a student he was elected one of the presidents of the Royal Medical Society.

For seven years afterwards he assisted his uncle, Sir James Young Simpson, the discoverer of chloroform. In 1870 he was appointed to the Chair of Midwifery and Diseases of Women and Children at Edinburgh University, which he held until 1905. He filled the office with much distinction, and the religious work among students which he carried on enthusiastically won him a large measure of regard. He wrote a number of memoirs and edited his uncle's lectures on the diseases of women. He was knighted in 1906. In that year his old University conferred on him the degree of LL.D. In 1902 he received the honorary degree of Doctor of Science from the Victoria University.

DR. WILLIAM BROWN RICHARDSON, M.R.C.S., BLACKPOOL.

The death occurred suddenly on March 30th of Dr. William B. Richardson in his sixty-ninth year. Educated at Leeds, deceased qualified M.R.C.S. in 1875. He was a well-known figure in Blackpool where he had been in practice for 40 years. He was one of the founders and a generous supporter of the Blackpool Victoria Hospital, being honorary surgeon to the institution for 20 years.

DR. FREDERICK M. JOHNSON, M.D.Edin. AND MELBOURNE.

The friends of Dr. Frederick Miller Johnson, of Albert Park, Melbourne, will have received with deep regret the news of his death, which occurred in Gallipoli on November 29th last. He was a nephew of the late Sir William Gull, received his medical education in Melbourne and Edinburgh and graduated at both Universities. He pursued his post-graduate studies in Vienna and Heidelberg. In 1889-90 he held the post of Resident Medical Officer at the Royal Waterloo Hospital for Children and Women, London, and became a great favourite with all the members of the staff; not only because of his pleasant manners and invariable good humour, but also on account of the conscientious and satisfactory manner in which he carried out his duties. Later he practised in Albert Park, Melbourne, with much success, and was very popular with his colleagues in that city.

It is only two years ago that in the spring of 1914 many of Dr. Johnson's old friends had the pleasure of welcoming him in London, where he was taking a holiday in the company of his daughter. At the outbreak of the Great War Dr. Johnson, with patriotic ardour, joined the 6th Field Ambulance of the Australian Imperial Forces. In the summer of 1915 he spent six weeks in Egypt, and was then sent to Gallipoli where he was made a Divisional Sanitary Officer and incurred many serious risks. Shortly before his death he was promoted to the rank of Major.

On November 29th, whilst carrying out his work of inspection in the trenches, there was an unusually severe bombardment by the Turks, and he was buried in a trench by the explosion of a shell; when dug out he was found to be dead. Those in higher commands in Gallipoli speak in the highest terms of the thoroughness and fearlessness with which he had performed his duties throughout the campaign.

The following passage from a letter written by Mrs. Miller Johnson may be quoted as an indication of the courage with which the wives of our fallen friends support their losses:—"I feel I have no right to complain; he died for his King and country, and some day I shall feel proud of it; just now I can only feel the terrible loss to the children and myself."

DR. ERNEST BRICE, L.R.C.P. AND S.Ed., L.F.P.S.Glasg., MAJOR R.A.M.C. (T.F.), SWANSEA.

The death has occurred at Swansea of Major Brice, a well-known local doctor. Born in Leicester, Dr. Brice received his medical training at Birmingham, and qualified in 1896. He settled in Swansea 15 years ago. About nine years ago he joined the 3rd Welsh Field Ambulance, and upon the outbreak of war was promoted to the rank of Major. Dr. Brice held several important local appointments.

DR. FRANCIS H. DRAKE, M.R.C.S., L.R.C.P., LEEDS.

The death has occurred, at Headingley, Leeds, of Dr. Francis Henry Drake, stated to be the last male adult descendant of Sir Francis Drake, the naval hero of Spanish Armada fame. Educated at Leeds, he took his qualifications in 1870 and 1871. After acting as House Surgeon at Hartlepool Hospital and the Leeds General Infirmary, he settled in Leeds, and was for many years doctor at Adel Reformatory School. He leaves a widow and a son.

MAJOR C. J. HOLMES, M.D., F.R.C.S.I., LANCASTER.

The death is announced of Major Charles James Holmes at Lancaster. He was the youngest son of Mr. John Holmes, Athlunkard, County Clare, and was born in the year 1857. He received his medical education at Queen's College, Cork, became M.D. in 1882, and F.R.C.S.(I.) in 1890. He joined the Army Medical Service in 1882, and served in the Egyptian Campaign in that year, for which he was given the

medal. Major Holmes was with the Sudan Expedition in 1885 and with the Expedition to Dongola in 1896, and received the medals for both. In recognition of his services in the South African War he was awarded the Queen's medal with clasp and the King's medal with two clasps.

DR. WILLIAM G. MACPHERSON, M.B., C.M., BOTHWELL.

DR. WILLIAM GRANT MACPHERSON died suddenly at Bothwell on March 31st. Educated at Edinburgh University, he qualified in 1888, and went to Bothwell as assistant to the late Dr. Bruce Goff, later becoming his partner. Dr. Macpherson was Chairman of the Local Medical and Panel Committee for the County of Lanark.

REVIEWS OF BOOKS.

URGENT SURGERY. (*a*)

THE second volume of this magisterial work, with its 20 full page plates and 1086 illustrations, deals with the genito-urinary organs, the rectum and anus, strangulated hernias and lesions of the extremities. Reiterating the remark which we made in reference to the previous volume, the author has admirably achieved his object of teaching surgery pictorially. We recognise, of course, that surgery, as a practical art, must be *learned*, and can only be partially and imperfectly *taught*, but in the hands of a man who has acquired by practice the indispensable minimum of manual dexterity, such a volume is of inestimable value.

Urgent surgery comprises minor as well as major interventions, and both categories are dealt with, so that while many operations are of so elaborate a nature as to interest only the pure surgeon, there are plenty of others that will appeal to country and colonial practitioners—in fact, to all those who, by temperament or under the strain of conditions of environment, are prepared to face whatever emergency may turn up. We know no other work that can compete with this volume in this respect. No detail is too inconsiderable for notice, no interventon too complicated for description.

Urgent surgery will be found to comprise such interventions as colpotomy, the relief of hæmatocolpos, curettage of the uterus, and even perineorrhaphy. It ranges from incision of a vulvo-vaginal abscess to decapsulation of the kidney for anuria, from paraphimosis to the treatment of complicated strangulated herniæ, touching *en route* on such topics as the removal of foreign bodies from the urethra and rectum, in reference to which the author has many ingenious tips to give.

The most important section of the volume is devoted to injuries of the extremities: dislocations, fractures, crushes, damage to nerves and vessels, etc., and the treatment of diseases such as osteomyelitis. Much of this comprehensive section has a very urgent direct bearing on war surgery and, incidentally, very useful information is given on the *technique* of plaster fixation apparatus, the which are far more generally employed in France than in England.

We can confidently predict popularity for this work, appealing as it does to the surgeon, the specialist and the practitioner, all the more so by reason of the sprightly fluency of the text, which has not suffered unduly from translation from French into English.

This review would be incomplete were we to omit a few words in praise of the illustrations drawn by Dr. E. Daleine and A. Lenbo (729), of which we cannot speak too highly. They are remarkably lifelike, and skilfully delineated, and admirably reproduced on opaque art paper. Close upon 200 of the illustrations are from original photographs and there is a striking absence of the stereotyped diagrammatic drawings to which we have become accustomed—in short, the work is original, artistic and complete.

(*a*) "Urgent Surgery." By Felix Lejars, Professeur Agrege of the Faculty of Medicine of Paris, Surgeon to the Hôpital Saint-Antoine, etc. Translated from the 7th French Edition by Wm. S. Dickie, F.R.C.S., and Ernest Ward, M.D., F.R.C.S. (Third English Impression.) Vol. II. Bristol: John Wright and Sons, Ltd. 1915. Price 25s. net.

PHYSIOLOGY FOR NURSES (*a*).

THIS is a clearly written and fairly concise introduction to the science, though perhaps tending to overlap the boundaries of an elementary book. If those who have their training really judge it necessary that nurses should be taught in their physiology lectures such details as the mechanism of the larynx and the Hughlings-Jackson view of brain-levels, then their third-year lectures should be time enough for subjects which are often a stumbling-block to junior medical students. Indeed, we imagine that the best way to use the manual would be to spread its 18 chapters through the three years of a nurse's course, with revision classes in the second and third years. We can scarcely believe that the sternest of teachers would attempt to compress all the matter of this book into the first year.

The introductory chapter very rightly reminds the student of the debt we owe to the vivisector, and we wish page 3 were further strengthened by a footnote specifying categorically some of the triumphs of experimental physiology.

From Chapter 2, the reader is taken stage by stage through the divisions of the subject, beginning with a clear and easily grasped exposition of the cell theory. "Food and Food-stuffs" is rightly treated in considerable detail in Chapter 4, though we think sufficient prominence is not given in page 28 to the importance of the harder foods to promote mastication in children. The sections on "Bone" in Chapter 9 are good, but should not the current description of the function of the periosteum as "continually forming layers of bone which bring about a steady increase in thickness" (page 82), be qualified by some reference to Macewen's criticism of this long-accepted view? This investigator has brought forward evidence which merits consideration that the function of the periosteum is not to produce bone but to limit the production of bone, osseous regeneration taking place from the osteoblasts of the bone itself. In the account of the blood in Chapter 12, the contents of the plasma should, we think, have included some mention of "complement," although we concede that the very mention of this creates difficulties in an elementary manual. Perhaps a footnote, with some reference to the modern view of Vaccines, might be added. We are rather surprised in Chapter 17 to read (page 172) that "the usual test for colour blindness is to give a person a piece of red wool and ask him to pick out from a large number of skeins of wool," &c Surely the "test" mentioned is now sufficiently discredited by Edridge-Green's work and by practical experience. Examiners for the railways, *e.g.*, seldom resort to it. In the Appendix, chiefly concerned with the examination of the urine, some reference should have been made under the Fehling test to its fallacies.

The book contains an index, but no table of contents. Most of the diagrams do not err in complexity, some are decidedly crude in drawing. In Figures 25 and 27 we note that the lines showing the capsule are not very clearly denoted, and in the line drawings additional clearness would have been gained by the use of thick and thin lines, particularly in Fig. 50 (movement of the ribs). But all these are but surface blemishes, and we can give no better commendation to the book than to suggest that practitioners of say 20 years' standing should occasionally read through a chapter or two—not a difficult task, thanks to the good type, short paragraphs, and abundant cross headings in thicker type. It will repay the sacrifice of their scanty leisure, especially if they search their memories, asking themselves to what extent they can criticise or amplify this necessarily condensed presentation of the rudiments of science.

An excellent feature of the book is that the bearings of physiology on the child, not merely on the adult, are insisted on throughout. This, as the Editor of a certain weekly would say, is as it should be.

(*a*) "Physiology for Nurses." Drummond. Pp. 210, illustrations, 81. 8vo. London: Edward Arnold. 2s. 6d. net.

TROPICAL HYGIENE (*a*).

The "residents in tropical and sub-tropical countries" for whom this has been written, will find it impossible to invest three rupees more profitably than in the purchase of this little book. Provided that they absorb its contents, and if they do not the fault will not be the authors', it may almost be said to embody a cheap life assurance in its pages. If any fault may be found with its scope, it is that it caters more for Indian residents than for others, the writers being distinguished Anglo-Indians; but no tropical resident can fail to benefit by its pages. To the junior medical officer and practitioner it must be of great service as a compendium, while its great merit is that the non-technical reader will find little or no difficulty in its perusal. Its 52 illustrations, line and photographic, aim at clearness rather than artistic effect, and we only regret that some of the most important of the line diagrams are so reduced in size as to need a reading lens to grasp properly, thus impairing their usefulness. As a frontispiece an ingenious diagram of the two ways in which the malaria parasite multiplies is reproduced, and this would have been better if bound opposite the diagram of the life-cycle of the parasite on page 208, a diagram whose value is in inverse proportion to its size. A pleasant literary flavour is given by each of the 14 chapters being headed with a quotation, the sources ranging from "sage Hippocrates" to Meredith Townshend.

The chapter on Food in the Tropics (pp. 88 seq.) is full of valuable details, various dietaries being drawn up with their weights. The writers have a good word to say for "the now well-recognised cult of Fletcherism," and rightly denounce the practice of feeding children too exclusively on slops; they should always be allowed something requiring mastication" (page 117). It is singular how many larger works on pediatrics fail to emphasise this. On alcohol their experience is that it should be used most sparingly in the tropics, "in all its forms"; on the practice of "pegging" at the club bar before dinner they are merciless, while conceding a weak peg or glass of wine with the evening meal to the "harassed Indian official" as a digestive and nerve sedative. Afternoon tea, they counsel, is "an unnecessary and useless meal"; here we fear the loyalty of the average reader will be severely strained. With their recommendation of wool wear next to the skin we cannot agree. Surely the first use of underclothing is to absorb perspiration, and absorbability is the last use that can be claimed for wool. Cellular linen or cotton such as "Empire Mesh" or "Aertex" are altogether preferable for the purpose. In the matter of clothing, and also of food, children are not forgotten. Disinfection and the disposal of refuse receive full treatment, and the chapter on Insects and Disease is illustrated by many good line drawings, the mosquito coming in for an especially full share. Chapter 12, on the Climate of the Tropics, strikes a note of cautious hope, referring to Cuba and Panama as instances of what progress in sanitary science may yet achieve. Chapter 13, on Hygiene of Camps, now includes Malta Fever; for the fly nuisance in camp the authors pin their faith to the method of 2 per cent. solution of formaldehyde, though other means receive mention. A full chapter on hydrophobia concludes the book.

Appendix II, on the distinctive characters of certain flies, would gain by diagrams being incorporated, even though the already too large page (folding) were increased. The diagram and the description in juxtaposition would give a far clearer mental picture, especially to the lay reader.

It may be hoped that in future editions of "Lukis and Blackham" it will be found possible to include some hygienic notes for European ladies, especially on matters of gestation and nursing. Some references should also have been made to Prickly Heat, frequently one of the worst troubles, it can hardly be called a minor one, of Anglo-Indian life.

(*a*) "Tropical Hygiene." By Surgeon-General Lukis and Lieut.-Col. Blackham. 3rd edition, revised and enlarged. 8vo. Calcutta: Thacker, Spink and Co. London: Thacker and Co.

TUBERCULOSIS IN CHILDREN. (*a*)

Dr. Barty King has rendered signal service to English-speaking members of the medical profession in making known to them the work of Dr. Anthon Ghon, of Prague, in connection with the primary lung focus of tuberculosis in children. It may be urged that, after all, the discovery of such a lesion is chiefly of academic importance, since the tracheo-bronchial lymphatic glands invariably became infected with tubercle early in the course of pulmonary tuberculosis in childhood. The initial focus, indeed, is in danger of being overlooked altogether, even at an autopsy, for the secondary manifestations are apt to mask the primary. As far back as 1876, Parrot had formulated this view of similar adenopathies," according to which the tracheo-bronchial lymphatic glands may be regarded as the "mirror of the lungs." Later on, Kuss and Albrecht investigated the subject further, and these observers were convinced of the importance of carefully seaching for the tubercle in the lung corresponding to the affected bronchial lymphatic gland. Dr. Ghon has sought to confirm these views and in the present work these results are given of his autopsies upon 170 cases of tuberculosis in childhood in which primary lung foci were found. In the majority of cases only a single pulmonary focus of disease was found, and of these the larger number showed dry caseation. In 114 of the cases, changes in the pleura were also discovered. The right lung showed more primary foci than the left, and the anterior surface of the upper lobe appeared to be a favourite situation. All the pathological evidence tended to show that the primary lung focus was never formed after the perforation of the altered broncho-pulmonary or tracheo-bronchial lymphatic glands, but was always present before. The author regards his researches as tending strongly to support the *aerogenous origin* of the pulmonary focus in the tuberculosis of children, a theory to which no objection can be advanced on physiological or clinical grounds. Very small foci in the lungs are difficult to demonstrate, and in the fourteen cases that did not present this feature in a certain proportion of these the channel of infection was incontestably outside the lung. The practical importance of the discovery of a primary lung focus in the tuberculosis of children is obvious from the hygienic standpoint.

ON SQUINT. (*b*)

It is a pleasant task to read the fourth edition of Mr. Worth's classic work "Squint," if only to follow the evolution of the author's treatment of that minority of squint cases which are not cured, either by glasses alone, or by glasses and fusion training. Up to ten years ago the author had performed simple tenotomy for small degrees of squint, and the combined operation of tenotomy and advancement for larger degrees. Further experience has led him to abandon tenotomies because of the uncertainty of the result, and to treat all forms of squint by advancement alone, in large degrees of deviation the correction being divided equally between the two eyes. In this respect he has followed the path traced by Landolt. Mr. Worth has also given up the black silk suture, treacherous in its strength, for white silk; the finest plaited in all probability, though this is not stated. To render the removal of the white suture easy, he ingeniously threads a small ring of black silk on the suture at its point of crossing on the conjunctiva. This ring is picked up with forceps to lift the suture off the globe so that it can be cut across without difficulty when it is to be removed.

By employing this method of treatment, Mr. Worth has been able to cure that class of occasional squint which he calls "neuro-pathic divergence." Stress is laid on the difficulties af the operation, but if any-

(*a*) "The Primary Lung Focus of Tuberculosis in Children." By Dr. Anton Ghon. Translated by D. Barty King, M.A., M.D.Edin., M.R.C.P.Lond. and Edin., Assistant Physician, Royal Hospital for Diseases of the Chest, London, etc. Pp. xx., 172. with 72 illustrations. London: J. and A. Churchill. Price 10s. 6d. net. 1916.

(*b*) "Squint, its Causes, Pathology and Treatment." By Claud Worth, F.R.C.S., Surgeon, Royal London Ophthalmic Hospital. Fourth edition, pp. 260. London: Bale, Sons and Co. Price 6s.

one follows Mr. Worth's explicit directions and makes use of Pooley's method of infiltrating novocain so as to obtain complete anæsthesia the result should be perfect. By a slip at page 220 the tying of the marking suture is referred to in the plural, as if more than one of these had been used.

The theory advanced by Mr. Worth as to the ætiology and treatment of squint is now so generally accepted that one might hope in the next edition to see the scaffolding removed from the structure. If this were done and the essential parts of the theory and practice printed in a small and cheap little pocket book it should become the guide for every County Council school doctor throughout the Empire, and thereby lead to the rescue of the sight of countless squinting eyes from amblyopia, which, when untreated, is their fate. If this were done, it would be well to alter a few details—*i.e.*, to speak only of the apex of a prism, and not in one place of the apex and in another of the base.

At the same time, one might endorse Mr. Worth's statement that too little attention is paid in this country to the examination and the treatment of heterophoria, which is so lucidly considered in the pages of this admirable work.

MILITARY ORTHOPÆDICS. (*a*)

THIS is a thoroughly practical little book, and gives the author's experience and treatment in the various orthopædic conditions that may come under the notice of the military surgeon. For its size, it contains a vast amount of information and many helpful hints. The opening chapter describes the different causes and the treatment of dropped foot, whilst the final chapter deals with artificial limbs. Between these, every possible condition from spondylo-listhesis to the cure of corns is ably handled. At the end of the book there is an appendix which in its first part gives a useful table of the approximate cost of the appliances described, while the second part is devoted to the treatment of more or less permanenly disabled soldiers. The author points out how the present machinery does not appear adequate, and he appends a memorandum dealing with this important subject. We strongly recommend this book.

POST-MORTEM METHODS. (*b*)

THIS book by Prof. Beattie is included in the Cambridge Public Health Series of volumes, edited by Professors Graham-Smith and Purvis. Although it gives very fully the best methods for making *post mortem* examinations, it is not merely a handbook on these methods, but the more important lesions which are found in the organs are indicated, the methods for recognition and demonstration of these are given, and the points which should receive special attention and special description are noted. In the later chapters also, advice is given as to the more important changes which should be sought in investigating a case in which a particular disease is suspected. Again, the methods which are used in making an efficient bacteriological examination, are given fairly completely, although for the actual bacteriological work following the first inoculation the student is referred to a treatise on that subject.

Some few of the directions are, however, a little difficult to follow, and would be simpler if diagrams were more used. For instance, it is recommended to make sections of the brain "parallel to its long axis." This has no meaning, as the number of possible planes of section is infinite: it is only later in the paragraph that we find that these sections are intended to be horizontal. Apart from a few such blemishes, this volume can be thoroughly recommended as a help in making a complete and systematic examination, whether the worker be a trained pathologist or a general practitioner, so that no point of any importance may be overlooked.

(*a*) "Notes on Military Orthopædics." By Paul Bernard Roth, M.B., F.R.C.S. Pp. 56. Fig. in text, 13. London: Henry Kimpton. 1916. Price 1s. net.

(*b*) "Post-Mortem Methods." By J. Martin Beattie, M.A.M.D. Demy 8vo., pp. x. and 231: with 8 plates and 3 figs. in the text. Cambridge. The University Press. 1915.

NEW BOOKS AND NEW EDITIONS.

The following have been received for review since the publication of our last monthly list:—

ADLARD AND SON, AND WEST, NEWMAN (London).
Cleft Palate and Hare Lip. By Sir Wm. Arbuthnot Lane, Bart., M.S., F.R.C.S. Third edition. Pp. 102. Price 10s.
The Royal London Ophthalmic Hospital Reports. Vol. XX., Part II. March, 1916. Edited by J. Herbert Parsons. Price 7s. 6d.
The City of Din: A Tirard Against Noise. By Dan McKenzie, M.D.Glasg. Pp. 115. Price 3s. 6d. net.

BAILLIERE, TINDALL AND COX (London).
The Sex Complex. By W. Blair Bell, B.S., M.D.Lond. Illustrated. Pp. 233. Price 12s. 6d.
Collected Papers on Analytical Psychology. By C. G. Jung, M.D., LL.D., formerly of the University of Zürich. Authorised Translation. Edited by Dr. Constance E. Long. Illustrated. Pp. 392. Price 12s. 6d.
Surgical Nursing and Technique. A Book for Nurses, Dressers, House Surgeons, etc. By Chas. P. Childe, B.A., F.R.C.S.Eng. Second edition. Illustrated. Pp. 229. Price 3s. 6d.
Orthopedic Surgery. By Edward H. Bradford, M.D., and R. W. Lovett, M.D. Illustrated. 5th Edit. Pp. 416. Price 15s.

BAILLIERE ET FILS, J. B. (Paris).
Les Fievres Paratyphoides. Par Jacques Carles. Pp. 95. Price 1 fr. 50 c.

BALE, SONS AND DANIELSSON, LTD., JOHN (London).
Bed-Sores: Their Prevention and Cure. By Catharine W. Smart. Pp. 52. Price 1s. net.

BLOOMFIELD, F. I. (Coventry).
Income Tax, War Rates, 1915-16. How Each Taxpayer is Affected. Seventh edition. Pp. 44. Price 1s.

CAMBRIDGE UNIVERSITY PRESS (Cambridge).
Occupations: From the Social Hygienic and Medical Points of View. By Sir Thomas Oliver, M.A., M.D., etc., etc. Pp. 110. Price 6s.

CASSELL AND CO., LTD. (London).
Diseases of the Nose and Throat. By Sir St.Clair Thomson, M.D., F.R.C.P.Lond., F.R.C.S.Eng. Second edition. Illustrated. Pp 858. Price 25s.

CHATTO AND WINDUS (London).
Herbert Fry's Royal Guide to the London Charities. Edited by John Lane. Pp. 351. Price 1s. 6d.

CHURCHILL, J. AND A. (London).
Surgery in War. By Alfred J. Hull, F.R.C.S., with a preface by Sir Alfred Keogh, K.C.B., M.D. Illustrated. Pp. 390. Price 10s. 6d.

LEWIS, H. K., AND CO., LTD. (London).
A Pocket Medical Dictionary. By George M. Gould, A.M., M.D. Seventh edition revised. Pp. 1003. Price 5s.
The Adolescent Period: Its Features and Management. By Louis Starr, M.D., LL.D. Pp. 211. Price 4s. 6d.
A New Treatment for Gonorrhœa. By Charles Russ, M.B.Lond., M.R.C.S.Eng., L.R.C.P.Lond. Pp. 38. Price 3s.
Modern Medicine and Some Modern Remedies. By Thomas Bodley Scott, with a preface by Sir Lauder Brunton, Bart., F.R.S. Pp. 159. Price 4s. 6d.

LONGMANS, GREEN AND CO. (London).
The Involuntary Nervous System. By Walter Holbrook Gaskell, M.A., M.D., F.R.S. Illustrated. Pp. 178 Price 6s.

MACLEHOSE AND SONS, JAMES (Glasgow).
Bernhardi and Creation. A New Theory of Evolution. By Sir James Crichton-Browne, M.D., D.Sc., LL.D., F.R.S. Pp. 71. Price 1s.

MACMILLAN AND CO., LTD. (London), THE MACMILLAN CO. (New York.
The Treatment of Acute Infectious Diseases. By Frank Sherman Meara, M.D., Ph.D. Pp. 540. Price 15s.
Archives of the Middlesex Hospital, Clinical Series No. XV. Edited by W. Sampson Handley and Victor Bonney. Pp. 116.

MILLS AND BOON, LTD., (London).
A Manual for Nurses. By Sydney Welham. Second edition. Pp. 230. Price 1s. 6d.
Stammering and Successful Control in Speech and Action. By Edwin L. Ash, M.D.Lond. Pp. 116. Price 2s. 6d. net.

PHILOPOLIS PRESS (San Francisco).
New Concepts in Diagnosis and Treatment. By Albert Abrams, A.M., LL.D., M.D. Illustrated. Pp. 333. Price —.

TAYLOR, WM. J. (Philadelphia).
S. Weir Mitchell, M.D., LL.D., F.R.S., 1829-1914. Memorial Addresses and Resolutions. Pp. 156. Price —.

PUTNAM'S SONS, G. P. (New York).
Mosquito Control in Panama. By J. A. Le Prince, C.E., A.M., and A. J. Orenstein, M.D., with an Introduction by L. O. Howard, LL.D. Illustrated. Pp. 335. Price 10s. 6d

WERNER LAURIE, T. (London).
"An Irishwoman in China." By Mrs. De Burgh Daly. Illustrated. Pp. xi. and 295. Price 10s. 6d. net.

WRIGHT AND SONS, JOHN (Bristol).
On Modern Methods of Treating Fractures. By Ernest W. Hey Groves, M.S., M.D., B.Sc., F.R.C.S. Pp. 286. Price 7s. 6d.
Text-Book of Nervous Diseases. By Charles L. Dana, A.M., M.D., LL.D. 8th Edit. Illustrated. Pp. 632. Price 21s.

Medical News in Brief.

Royal Victoria Hospital, Belfast.

The annual meeting of the Royal Victoria Hospital was held on the 31st March.

The annual report stated that 3,189 new cases were received, and they, with the 258 remaining from the previous year, make a total of 3,447 intern patients treated during 1915. The daily average number of patients under treatment in 1915 was a good deal higher than in 1914—namely, 266.8 against 238.1. Amongst these was a large number of sailors and soldiers from active service, who all did remarkably well, the only death amongst them being one from pneumonia. A great number of civilians, too, who were prevented from enlistment on account of hernia or varicose veins, etc., were admitted for operation, and many a man is to-day serving his country whose services but for his treatment here would have been lost.

In the extern department 29,145 new cases were received. The daily average treated in the extern department was over 240. There were 1,598 operations performed in the wards, and 640 in the extern department, and the ambulances brought 1,500 cases to the hospital, mainly due to accidents. In the hæmatological and vaccine therapy department 303 new cases were received, and 3,500 treatments given. Dr. Houston, who was in charge, having been absent on war service for the last six months, Dr. Rankin had carried on the work of the department in addition to that of his own. In the electrical department 110 new cases were received, 4,123 treatments given, and the huge number of 1,222 radiograms taken.

Infant Mortality.

In the House of Commons on April 5th, Mr. Walter Long, replying to Mr. King, said:—The latest figures for 1915 show that the death-rate under one year of age amounted to 110 per 1,000 births, as compared with 115 per 1,000 births in the previous ten years, and 105 in the year 1914 and 108 in the year 1913. In spite of the general restriction of local expenditure, active steps are being taken by practically all the larger local sanitary authorities to lessen infant mortality and to promote the welfare of infants generally. A large number of local authorities have appointed health visitors, who advise mothers as to the care of their infants; in most of the large towns maternity and child welfare centres have been established, at which expectant and nursing mothers receive medical advice and minor treatment; and in many places arrangements have been made for the provision of midwives and of doctors for the confinement of necessitous women and for other assistance for expectant and nursing mothers and children. My Department have distributed a grant of about £41,000 in aid of maternity and child welfare work during the financial year which has just ended.

Air Raid Effects on Child Life.

Interesting evidence as to the effect of air raid alarms on child life was given at an inquest held at a north-east coast town on April 5th. A local doctor attributed the death of a two months' old child to shock owing to air raid alarms. These alarms, he said, affected mothers, and that day he had seen 78 children at the local dispensary, many of whom had suffered from convulsions due entirely to air raids. They were not so young as the child in question.

The Coroner seemed incredulous, but said he had every respect for the doctor's opinions. He could understand the effect of alarms on unborn children, but could not wholly accept the view that a two months old child was susceptible to the effect of these alarms.

The jury accepted the view of the doctor and returned a verdict accordingly.

Russian Medica Mission.

A Russian medical mission, consisting of Professor Dr. Tarassevitch, Prince Alexander Galytzine, and Professors Mikhailoff and Crzenoxi, is now in England, investigating the military hospital *régime*, and especially private initiative in the care of the wounded. The mission, which will also pursue similar inquiries in France, has been despatched by the Union of Zemstvos, or local Councils.

Fewer Birmingham Babies.

Dr. Robertson, Medical Officer of Health for Birmingham, stated on April 3rd that as a result of the war there were between 4,000 and 5,000 fewer babies in that city than last year. If the Empire was to be kept together the infant life must be preserved.

Birmingham Maternity Hospital.

At the annual meeting of the Governors of the Birmingham Maternity Hospital, held on April 3rd, the House Committee reported that during 1915 there had been 544 admissions, as compared with 640 in 1914 and 532 in 1913. Fifty-seven pupil midwives had been trained; also two monthly nurses and one babies' nurse. Forty-five entered for the C.M.B. examination; forty-two passed, three failed. Twenty men medical students and two women medical students applied for training, and were accepted. Two hundred and forty-nine infants were visited in their homes by members of the Infant Health Committee; 1,908 visits were paid, and 112 infants were still being visited once a fortnight.

Royal Medical Benevolent Fund Guild.

We have received a copy of the 6th annual report of the above. The council state that "new members have been enrolled and financial success has crowned our efforts."

The Royal Medical Benevolent Fund has now been registered under the Companies Acts of 1908 and 1913 as an association *not* for profit. It thus becomes a body corporate, with perpetual succession, just as if it were incorporated by Royal Charter or special Act of Parliament. The Guild, being an integral part of the fund, shares these privileges.

The report goes on to say "our acknowledgments are due to the Press, lay and medical, for their advocacy of our cause. Thanks to them we are now becoming better known, and one feels sure there are 'grateful patients' glad of an opportunity to show their gratitude to their own medical man by helping the Royal Medical Benevolent Fund and Guild."

The year's subscriptions are £694 12s. 11d. and donations £1,572 9s. 8d., being a total of £2,267 2s. 7d.

Doctors for the Forces.

The Central Medical War Committee has resolved not to call up practitioners under the enrolment scheme unless and until 75 per cent. of those medical men in England and Wales who on January 5th were of military age (*i.e.*, under 45) and not holding a commission have enrolled, or have since that date received a commission in His Majesty's forces or a letter of provisional acceptance.

The committee has asked the council of the British Medical Association to consider the desirability of the formation of a compassionate fund for medical officers serving in the war.

PASS LISTS.

Royal Colleges of Physicians and Surgeons of London.

At the second professional examination in Anatomy and Physiology, held on March 30th and 31st, and April 3rd and 4th, 78 candidates presented themselves, of whom 56 were approved and 22 were rejected. The following are the names of the successful candidates: Y. Abdel-Messiah, B.A., A. Abelson, B.Sc., D.ès-L., N. D. Ball, Margarita S. Barfield, J. S. Boruchowitz, J. A. A. Bouic, O. H. Brown, N. C. Cooper, A. N. M. Davidson, E. S. Davies, F. S. Drewe, A. Eidinow, F. K. Eskrit, F. A. Evans, P. Faraci, J. E. Fishburn, J. O'F. Fletcher, R. Gainsborough, E. S. Gawne, Nannie Gibson, C. Gill-Carey, P. E. Gorst, L. Handy, H. W. Hill, B.A.Cantab., T. R. E. Hillier, A. B. Isaacs, G. H. Johnson, E. F. Kerby, H. H. Khan,

L.M. and S.Bombay, F. W. Lemarchand, P. Lloyd-Williams, D. McClean, J. J. M. Macdonnell, C. Moffatt, J. S. Moore, A. R. Neckles, C. Nicory, A. G. Ord, L. D. Porteous, P. G. Quinton, W. E. Quitman, D. H. Richards, E. Sanders, M. C. Sarkies, H. M. Savery, W. M. S. Savery, E. A. Sparks, V. A. T. Spong, G. McK. Thomas, L.D.S.Eng., J. H. Tighe, B. M. Tonkin, W. S. Tunbridge, B.A.Oxon, J. E. de V. Van der Merwe, F. F. Wheeler, H. E. Williams, and R. Wolff, B.Sc.

London School of Tropical Medicine.

THE following candidates have passed the examinations during the term January—April, 1916:—*W. N. Leak, M.R.C.S., L.R.C.P., and H. Bayon, M.D. Genoa, with distinction; Miss V. G. Field, L.R.C.P. and S.Edin., E. A. Blok, L.R.C.P. and S.Edin., L.F.P. and S.Glasg., L.M.S.Ceylon, and J. A. Beels, M.D.

* Dr. Leak gained the Duncan Medal, this being awarded to the student who obtains the highest aggregate of marks.

University of Durham.

AT the Convocation, holden on Saturday, March 25th, 1916, the following Degrees were conferred:—

Doctor of Medicine for Practitioners of Ffteen Years' Standing.—Hugh B. G. Newham, M.R.C.S., M.R.C.P., D.P.H., and Samuel A. Sittampalam, L.M. and S., Ceylon; L.R.C.P. and S.; L.F.P.S.G.

Degree of Bachelor of Medicine (M.B.).—Arthur F. R. Dove, Harold K. Graham-Hodgson, Ethne Haigh, George Irving, Arthur E. Raine, Alfred Smirthwaite, Robert Welch, B.Sc.

Degree of Bachelor of Surgery (B.S.).—Arthur F. R. Dove, Harold K. Graham-Hodgson, Ethne Haigh, George Irving, Arthur E. Raine, Alfred Smirthwaite, Robert Welch, B.Sc.

Bachelor of Hygiene (B.Hy.).—Bloomfield G. H. Connolly, M.B., B.S.Durh. (*in absentia*) and William Grant, M.B., Ch.B.Edin.

Diploma in Public Health (D.P.H.).—Bloomfield G. H. Connolly, M.B., B.S.Durh., and William Grant, M.B., Ch.B.Edin.

Licence in Dental Surgery (L.D.S.).—Harold A. Metcalfe, Douglas E. Sayce, Lawrence Somerville-Woodiwis.

Dublin University.

THE following candidates have passed the Trinity College School of Physic Hilary Term examinations:—

Preliminary Scientific Botany and Zoology.—George E. Sainsbury, Jacobus F. Van Staden.

Chemistry.—Falkland L. Cary, Ivan W. Beatty, Leo V. Clifford, Richard B. Shaw.

Physics.—Maurice Nurock, John Lait (passed on high marks); Janie M. Cummins, Herbert F. Mooney, William B. J. Pemberton (equal); Robert H. M. Corbet, Doris L. Graham (equal); Leonard Abrahamson; David J. Browne, Francis V. Small (equal); Percival I. Levitt; William J. A. Russell; Robert Dormer; Christopher J. L. Brock, Robert A. O'Meara (equal); Eileen Hilda Dowse; Elsie A. Burns; Mervyn E. McBrien; Edward H. Frazer, Thomas D. Gordon, Patrick J. Healy, Isaac Levy (equal); Charles J. Shortt; Olive Baile, William B. Fox, Joseph B. Maguire, James A. Smith, Essie S. Smyth (equal); Moira M. Brown, Richard V. Dowse, Nora Griffith, Samuel W. Jameson, James J. P. Kelly, William T. Micks, Eric R. Murray, Frederik W. Pienaar, Henry P. Stack, Herbert W. Strong, Cecil S. Wilson (equal):

Intermediate Medical, Part 1.—Anatomy and Physiology: Altwyn J. Vorster, Reuben Rosnekov, Cyril D. Brink, Jan J. G. de Kock, William R. Burns, Olive G. Blackham, Henry B. Van der Merwe, William B. Briggs, Lionel Wigoder.

Intermediate Medical, Part 2.—Applied Anatomy and Applied Physiology: Harry L. Parker, Victor M. Synge, Crawford L. Wilson (passed on high marks); Lindley Albertyn; Patrick B. Molony; Robert M. D. Devereux; Mary C. Sheppard; Johannes C. Fouche; William L. Young; William P. Elford, Wilfred V. Pellissier (equal); William Sweetnam; Ernest E. Rollins; Kenneth Greer, Thomas H. R. McKiernan (equal); Paul H. S. Smith; Thomas B. H. Tabuteau; Eric J. Lydon, William A. Shannon (equal); Percival A. Dormer; Leslie J. Nugent; William F. McConnell; Thomas S. McDonald; Jason G. Bird; Ethel M. Luce; Eric S. E. Mack; James A. W. Cullen, Thomas M. Bentley (equal); James M. Hill; Daniel McElwee; Olive G. Blackham; John B. McGranahan; Pieter J. Swanepoel.

Final Medical, Part 1.—Materia Medica, Pathology, Medical Jurisprudence and Hygiene: Patrick Rock, Robert W. Nesbitt (passed on high marks); Joseph R. Brennan; Hirsh Brill; William J. McClintock; Sydney V. Furlong; Harry Banks; Andries A. L. Albertyn; Arthur I. Steyn; Charles P. Chambers; Willem P. Lubbe; Crosbie Weir; Sidney A. Clark; Thomas E. Hill; Fleetwood W. P. Sullivan (Materia Medica and Pathology); Michiel C. Dippenaar (Pathology, completing examination); Millicent Hamilton-Johnstone (Materia Medica, Medical Jurisprudence and Hygiene completing examination); Hastings H. Molloy (Materia Medica completing examination).

Final Medical Examination, Part 2.—Surgery (B.Ch.): Joseph W. Bigger, Thomas Lane, Charles L. McDonagh, Louis Blumberg, Millicent Hamilton-Johnstone, Mortimer McG. Russell, Eileen G. Gwynn, Frederick J. Murphy.

Medicine (M.B.): Joseph W. Bigger, Robert C. B. Ramsay, George W. Doran, John T. Westby, Millicent Hamilton-Johnstone, Eileen Gertrude Gwynn, Rupert Gordon.

Midwifery (B.A.O.): Millicent Hamilton-Johnstone, Joseph G. Bird, Frank Healy, John T. Westby, Sydney V. Furlong, Henry S. Campion.

Diploma in Public Health, Part 1.—Bacteriology, Pathology, Chemistry, Physics, and Meteorology: Brian D. Crichton.

Part 2.—Sanitary Engineering, Vital Statistics, Public Health, Hygiene, and Epidemiology; John R. D. Holtby, Marjorie Chapman, Florence Colquhoun.

University of Glasgow.

DEGREES OF M.B. AND CH.B.

THE following are the results of examinations held during March:—

The following have passed in the subjects indicated (A., anatomy; P., physiology; M., materia medica and therapeutics; Path., pathology):—C. O. Anderson, M.A. (A.), A. B. Austin (Path.), R. Bethune (M.), A. Black (M.), D. C. Bowie (P., M.), J. Bradford (Path.), A. D. Brown (A., P.), M. J. Cahalane (M.), T. W. Carstairs (P.), M. Chalmers, M.A. (A.), A. E. Cochrane (M.), H. A. Cochrane (M.), A. C. Connell (A., P.), E. M. E. Cumming (A., P.), W. Dempster, M.A. (M., Path.), J. C. Dow (A., P.), A. B. S. Drysdale (M.), K. H. Dyke (M., Path.), D. Finlayson (M.), J. P. Fleming (M.), T. Fleming (M.), T. Forrest (M.), A. D. Fraser (A.), K. J. A. Gillanders (M.), W. H. Gordon, M.A. (Path), A. S. Goudie, M.A. (M.), P. F. A. Grant (A., P., M.), J. S. M'L. Gray (M.), J. G. Harrower (M.), A. Henderson (M.), J. Hislop (M.), T. J. Honeyman (Path.), M. Hyman (M.), E. P. Irving (Path.), J. Irving (M.), J. Joels (M.), R. E. Kerr (M.), W. H. Kerr, M.A. (M.), W. M. Kerr (M., Path.), J. P. Kilty (M.), A. B. M'A. Lang, M.A. (Path.), G. Lean, B.Sc. (Path.), J. Liddell (M.), J. Lipschitz (M.), F. R. Lubovius (Path.), W. W. Lundie (Path.), A. J. Macartney (A., P.), D. MacColl (A., P.), H. E. M'Coll (M., Path.), A. B. Macdonald (A., P.), R. T. M'Gibbon (M.), A. D. C. M'Gowan (Path.), T. M'Gowan (M.), J. A. C. MacGregor (M.), D. B. M'Intosh (Path.), J. W. Mackay, M.A. (M.), D. W. M. MacKenzie (M., Path.), R. H. M'Kinop (Path.), J. G. M'Kinna (A., M.), J. M. Mackintosh, M.A. (Path.), W. S. L. M'Leish (M.), J. Macleod (A., P.), W. M'Linden (M.), F. K. Macmillan (A., P.), D. Macqueen (M., Path.), A. W. M'Rorie (M.), J. M. Melvin (M.), G. A. Mitchell (Path.), W. Napier (M.), J. Nicholson, M.A. (A. P., M.), I. L. Oluwole (A.), J. Paterson, (A., P.), J. W. Patterson (M., Path.), N. B. Peacock (M.), G. Pearson (M.), R. J. Peters (M.), J. B. Potter (M.), R. U. Qureshi (A., P.), I. M. Robertson (M.), J. J. Robertson (M.), F. W. Sandeman (M., Path.), T. R. Sinclair (Path.), C. L. Somerville (M.), T. Stark (A., P.), J. Stewart (A., P.), A. S. Strachan, M.A., B.Sc (M.), J. T. Taylor (A.), J. J.

Treanor (M., Path.), J. C. Vaughan (M.), A. R. Waddell (A., P.), J. L. Walker (M., Path.), W. A. Walker (A., P.), H. D. Wallace (M.), H. Wands (A., P.), R. Wiggins (M.), G. M. Wishart (M.), R. Young (A., P.).

WOMEN.

Annetta G. T. Anderson (Path.), Ellen D. Anderson (A., P.), Mabel N. Blake (M., Path.), Grace Chatterton (M.), Margharita M. L. Couper (M.), Grace A. Fleming (M.), Margaret O. Gallagher (Path.), Mary B. Gillespie (Path.), Jane E. Hanson (M.), Janet W. Hepburn (M.), Mary E. Knight, M.A. (M.), Elizabeth C. Loudoun (M.), Mary J. Macdonald (M.), Isabella Q. M'Fadzean (M.), Margaret T. M'George (M.), May E. MacIver (Path.), Maud E. D. Mackinnon (A.), Margaret G. M'Vey (M.), Florence F. M. Milne (A., P.), Mercedes M. Morton (Path.), Elizabeth P. Y. Paterson (M.), Vida J. Perry (A., P.), Margaret I. Prangnell (A., P.), Margaret N. Robertson (P.), Agnes P. Routledge (M.), Marjory M. Scanlan (A., P.), Katherine Scott (A., P.), Margaret M. C. Steedman (M.), Dorothea H. Suttie (M.), Lydia I. H. Torrance (M.).

The following have passed in Medical Jurisprudence and Public Health of the fourth professional examination (New Medical Ordinance):—

J. W. W. Baillie, J. E. Bannen, W. M. Cameron, M.A., R. Cunningham, D. Heard, F. W. Hebblethwaite, G. M. Hetherington, H. E. Hollis, J. R. R. Holms, J. N. Jamieson, M.A., K. M'Alpine, N. MacKillop, J. M. Mackintosh, M.A., H. Robertson, M.A., H. B. Sergeant, A. W. Smith, J. T. Wyliie.

WOMEN.

Janetta M. Alexander, W. J. Crawford, Margaret H. Glen, A. J. Marshall, May I. T. Reid, Marion Watson, Mary M. Weir, M.A.

The following have passed the Medical Jurisprudence and Public Health of the third professional examination (Old Medical Ordinance):—Alex. G. Brand, John M. Clark, William H. Gordon, M.A., E. G. S. Hall, Tom J. Honeyman, Andrew B. M. Lang, M.A., Arthur D. C. M'Gowan, Alex. B. Stitch, B.Sc., John A. White.

Note. Students under the Old Medical Ordinance who have not previously passed in Pathology will note that a pass at this time in Medical Jurisprudence is conditional on their also undergoing the present examination in Pathology.

DISTINCTION LIST.

The following have passed with distinction in Medical Jurisprudence and Public Health:—William M. Cameron, M.A., James N. Jamieson, M.A., Andrew B. M'A. Lang, M.A., James M. Mackintosh, M.A., Mary MacL. Weir, M.A.

Degrees of M.B. and Ch.B.—The following have passed the Fourth (Final) Examination:—William D. Allan, John Alston, William Baird, Christina B. Buchanan, Duncan Cameron, Joseph Chalmers, Douglas H. Coats, William K. Connell, Alexander F. Cook, Archibald S. Cook, Walter G. Cook, John N. Cruickshank, Andrew Davidson, Jane B. Davidson, John Dunbar, James B. Fisher, Matthew M. Frew, Thomas R. Fulton, William H. Gibson, Jessie C. Gilchrist, John Glaister, James S. Kinross, George Kirkhope, William J. B. Lavery, Robert Lindsay, M.A., Dorothy M'Cubbin, James W. Macfarlane, John MacInnes, Keith S. Macky, Duncan M'Laren, Elizabeth S. Martin, Frederick R. Martin, James M. Matheson, William W. Morrison, Alexander Morton, William O'Brien, James A. Paterson, Thomas S. Paterson, James H. Paul, M.A., B.Sc., William J. Poole, Thos. J. D. Quigley, James Richardson, Alexander W. Ritchie, George W. Ronaldson, Mary H. Routledge, Mary I. Sinclair, Jane Stalker, William M. Stewart, John L. Torley, Robert S. Weir, Clive A. Whittingham, Marion B. D. Wilson.

The following have passed with distinction:—In Surgery and Clinical Surgery—George Kirkhope. In Medicine and Clinical Medicine—Jane Stalker. In Midwifery—William D. Allan, Joseph Chalmers, John Dunbar, Mary H. Routledge, Clive A. Whittingham, Marion B. D. Wilson.

Scotch Triple Qualification Passes.

The examinations of the Board of the Royal Colleges of Physicians and of Surgeons of Edinburgh, and Royal Faculty of Physicians and Surgeons of Glasgow were concluded at Edinburgh on the 7th inst., with the following results:—

First Examination.—The following candidates passed:—Thomas A. du Toit, Robert B. Forgan, Wm. H. Kerr, Richard F. Kerr, Lizzie R. Clark, Mayberry H. Carleton, Jung B. Singh, and George C. Field. Biology.—Peter E. Malloch. Chemistry.—John Murray and Andrew W. Smith.

Second Examination.—The following passed:—Albert E. Hempleman, Reginald E. Hopton, Arthur S. Hughes, Eduard L. Adendorff, Rebecca Goodman, John K. Steel, and William Gibb. Anatomy.—Hugh W. Howatson. Physiology.—Jacob J. van Niekirk, Gordon S. Woodhead and James F. Cook.

Third Examination.—The following passed:—Cecil V. Samwell, Ernest E. Bronstorph, George P. de Silva, Henry Shaw, Andrew L. Meek and Christopher R. C. Moon. Pathology.—Mahmoud A. K. Mofreh, Eliza J. Stuart, Martin Fernando and Donald Stewart. Materia Medica.—Daniel C. Howard.

Final Examination.—The following candidates having passed the final examination were admitted L.R.C.P.E., L.R.C.S.E., L.R.F.P. and S.G.:—Zachariah A. Green, James E. Ainsley, John C. Bedwell, Harold C. A. Haynes, Bertram C. Haller, James Byrne, James V. R. Rohan. Salamon J. Abrahams, James Blackburn, Charles Harris, Andrew Caston, and Robert C. Wilson Spence. Medicine.—Stanley W. Hoyland. Surgery.—John J. Curtin. Midwifery.—John Adami and John J. Curtin. Medical Jurisprudence.—John H. Blackburn, Reginald V. Clarke, Charles G. Book, William McElroy, and Maurice A. White.

University of Aberdeen.

The following is a list of candidates who have passed the necessary examinations, and received degrees during March:—

Degree of Doctor of Medicine (M.D.).—Archibald D. Pringle, M.B., Mental Hospital, Observatory Road, Cape town. "Commendation" for Thesis.

Degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.).—With Second Class Honours: **Robert D. Lawrence, M.A., Aberdeen, **Arthur G. Reid, Aberdeen.

Ordinary Degree: William Alexander, M.A., Kemnay, Aberdeenshire, John Anderson, Croy, Gollanfield, Inverness-shire, Mary A. Chalmers, M.A., Aberchirder, Banffshire, Arthur J. Hawes, Woodbury, Lowestoft, Arthur A. Hearne, Kingston, Jamaica, Stanley Henry, Elgin, Eva C. Ironside, M.A., Huntly, Burjorji S. Kanga, Bombay, Thomas S. Law, Aberdeen, Arthur A. Mackenzie, M.A., Turriff, Charles W. Macpherson, M.A., Sunnybank, Dufftown, William J. Moir, Allavane, Banff, *Thomas O. Robson, Aberdeen, Albert E. B. Sim, Aberdeen, Forbes Simmers, Hatton, Cruden, Aberdeenshire. * Passed Fourth Professional Examination with "Distinction." ** Passed Fourth Professional Examination with "Much Distinction."

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s., post free at home or abroad

Foreign subscriptions must be paid in advance. For India Messrs. Thacker, Spink and Co., of Calcutta, are our officially appointed agents. Indian subscriptions are Rs. 15.12. Messrs Dawson and Sons are our special agents for Canada. For South Africa, The Record Publishing Co., Cape Town. Messrs. Geo. Robertson and Co., of Sydney and Melbourne, are our special agents for Australia.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

F. M. S.—On inquiry we find that all the Freemasons' Lodges in connection with the medical schools have continued their meetings since the outbreak of the war.

"A SISTER."

Visitor (at private hospital): Can I see Lieutenant Barker, please?

Matron: We do not allow ordinary visitors. May I ask if you are a relative?

Visitor (boldly): Oh yes! I'm his sister.

Matron: Dear me! I'm very glad to meet you. I'm his mother!—*Punch.*

AN ADVANTAGE OF WAR?

THE medical officer of Carnarvon states that the children of soldiers are to-day better clothed and better fed than they have been at any time during the past fifteen years.

DOCTORS FROM THE LABOUR EXCHANGE.

AMONG the posts advertised as vacant in the window of a London Labour Exchange on April 3rd was one for a lady doctor.

EX AQUALT.—In addition to the various antiseptic methods employed at the front, septic wounds are now being treated by a continuous electric current of 30 volts and 30 amperes.

NO EIGHT HOURS DAY.

IT was stated at Clerkenwell County Court that a doctor, with an artificial leg, was now standing for twelve hours a day at the operating table.

PERTH PANEL WORK.

IN 1915 one-third of the insured population in Perth received treatment, while each patient was seen by the doctor six times on an average. It is pointed out that three prescriptions which cost 6d. before the war had increased in cost to 1s. 6d., 2s. 7d., and 3s. 4d. respectively.

PHARMACOLOGIST.—It is against our rule to recommend any particular consultant. Our correspondent might seek advice from one of his medical customers.

THE CONSCIENTIOUS OBJECTOR.

IN the correspondence column on this subject in our last issue, for "patriotic principle" in Dr. T. Claye Shaw's letter read *petitio principii*, which is the logical term for begging the question.

SCHOOLCHILDREN'S GIFT.

A MOTOR-AMBULANCE, the gift of the schoolchildren of Wandsworth, has been presented to the Mayor of Wandsworth for the use of the 13th East Surrey Regiment, raised by him some time ago. The ambulance is the first in England to be fitted with heating apparatus.

Meetings of the Societies, Lectures, &c

WEDNESDAY, APRIL 12TH

HUNTERIAN SOCIETY (1 Wimpole Street, W.).—9 p.m.: Adjourned Annual Discussion on the Relationship of the Medical Profession to the State and the Community. Dr. H. J. Cardale, Dr. B. A. Richmond and others are expected to take part, and Dr. F. J. Smith will reply.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—Course of Lectures on the Anatomy of the Human Body, for First-aid and Ambulance Students (open to all members of ambulance companies and first-aid classes):—5.30 p.m.: Professor A. Keith. 4 p.m. to 7 p.m.: Exhibition of Anatomical Preparations and Specimens in the Theatre on lecture days, and between 10 a.m. and 5 p.m. in the Hall of the Museum on the following day.

THURSDAY, APRIL 13TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF DERMATOLOGY) (1 Wimpole Street, W.).—5 p.m.: Mr. J. E. R. McDonagh: The Rationale and Practice of Chemo-Therapy. N.B.—Fellows and Members of other Sections are invited to attend and to take part in the discussion.

FRIDAY, APRIL 14TH.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—Course of Lectures on the Anatomy of the Human Body, for First-aid and Ambulance Students (open to all members of ambulance companies and first-aid classes):—5.30 p.m.: Professor A. Keith. 4 p.m. to 7 p.m.: Exhibition of Anatomical Preparations and Specimens in the Theatre on lecture days, and between 10 a.m. and 5 p.m. in the Hall of the Museum on the following day.

ROYAL SOCIETY OF MEDICINE (SECTION OF ANÆSTHETICS) (1 Wimpole Street, W.).—8.30 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917. Paper: Dr. M. S. Pembrey and Dr. F. E. Shipway: Observations on the Influence of Anæsthetics on the Body Temperature. Demonstrations:—Dr. F. E. Shipway: Apparatus for the Administration of Warm Anæsthetic Vapours. Dr. Harold Low: Apparatus for the Intratracheal Insufflation of Ether. Dr. F. E. Shipway: Apparatus for the Intratracheal Insufflation of Ether. Captain C. T. W. Hirsch: Modification of Waller's Chloroform Inhaler.

CENTRAL MIDWIVES BOARD (Caxton House, Westminster, London, S.W.).—11 a.m.: Special (penal) meeting at Caxton Hall, Caxton Street, S.W.

Vacancies.

Galway Hospital.—Resident Medical Officer and Compounder of Medicine. Salary £100 per annum, with apartments and rations. Applications to S. J. Leonard, Clerk. (See advt.)

Highfield Military Hospital, Liverpool.—Assistant Resident Medical Officer. Salary £300 per annum, with rations, furnished apartments and resident allowances. Applications to the Clerk to the Select Vestry, Brownlow Hill, Liverpool.

Derbyshire Royal Infirmary.—House Physician and Casualty Officer. Salary £200 per annum, with board, residence, etc. Applications to E. Forster, Secretary.

Cambridgeshire Asylum, Fulbourn, near Cambridge.—Junior Assistant Medical Officer. Salary £200 per annum, with board, lodging, washing, and attendance. Applications to the Medical Superintendent.

Doncaster Royal Infirmary and Dispensary.—House Surgeon. Salary £250 per annum, and board, lodging, and washing. Applications to the Hon. Secretary.

Bury Infirmary.—Senior House Surgeon. Salary £250 per annum, with board, residence, and washing. Applications to the Hon. Secretary, Infirmary, Bury, Lancs.

Birmingham General Dispensary.—Resident Medical Officer. Salary £250 per annum, with furnished apartments, fire, lights, and attendance. Applications to Ernest W. Forrest, Secretary, 32 Union Street.

Leeds Public Dispensary.—Lady Resident Medical Officer. Salary £130 per annum, with board, residence, and laundry. Applications to the Secretary of the Faculty, Public Dispensary, North Street, Leeds.

The Guest Hospital, Dudley.—Assistant House Surgeon. Salary £120 per annum, with board, residence, and washing. Applications to the Secretary.

Putney Hospital, Lower Common, Putney, S.W.—Resident Medical Officer. Salary £150 per annum, with rooms, board, and laundry. Applications to the Hon. Secretary, at 198 Upper Richmond Road, Putney, S.W.

Appointments.

GRANT, J. DUNDAS, M.D.Edin., F.R.C.S.Edin., Surgeon in Charge of the Ear, Throat and Nose Department of the New Zealand Military Hospital, Walton-on-Thames.

MAINS, J. H., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Clackmannan District of the county of Clackmannan.

MARTIN, ROBERT COLLINS, L.R.C.P.Lond., M.R.C.S., Medical Officer for the No. 1 District by the Bristol Board of Guardians.

MORGAN, ALBERT THOMAS, L.S.A.Lond., M.D.Brux., Public Vaccinator for the Ashley District by the Bristol Board of Guardians.

Births.

COX.—On April 9th, at 8 Ellerdale Road, Hampstead, to Dr. and Mrs. R. J. H. Cox, C.M.S., Bannu, N.W.F.P., India—a daughter.

JACKSON.—On April 3rd, at "Harland Rise," Cottingham, East Yorks, the wife of Dr. T. C. Jackson, of a son.

Marriages.

CLARKE—WAKELING.—On April 5th, at Christ Church, Shooter's Hill, Roger H. Clarke, Surg. Prob., R.N.V.R., son of the late Edward Nalder Clarke and Mrs. F. J. Powell, to Marjorie Blanche, elder daughter of Mr. and Mrs. H. Wakeling, of Chesterton, Cambridge.

HARTY—CLARK.—On April 8th, at All Saints' Church, Notting Hill, John Percy Ingham Harty, M.B., F.R.C.S., Captain, R.A.M.C. (T.), second son of the late J. P. Harty, J.P., Cork, and Mrs. Harty, Bristol, to Helen Dorothy, second daughter of Mr. and Mrs. J. G. Clark, of 17, Ladbroke Gardens, W.

JOHNSTONE—GRAHAME.—On April 4th, at St. Columbia's, S.W., Thomas Johnstone, M.D., M.R.C.P., of Harrogate, youngest son of the late Thomas Johnstone, Beech Hill, Annan, to Agnes Mary Grahame, of Ripon, daughter of the late John Anthony Grahame, of Westminster and Sussex Gardens, W.

LEECH—BARKER.—On April 3rd, at Leonard Stanley, Ernest Bosdin Leech (of Manchester), M.D., Captain, R.A.M.C., to Mary, daughter of the late Rev. H. Walder, of Jamaica, and widow of Robert Barker, of Marple.

LUCAS—MCKAIL.—On April 3rd, at St. James's, W. Hampstead, Captain Reginald Blockley Lucas, M.B. M.S., R.A.M.C., eldest son of Mrs. A. R. B. Lucas, of Adelaide, S.A., to Cecily Helen, only daughter of Mrs. John McKail.

SMITH—ACKERLEY.—On April 6th, at St. Matthew's Church, Surbiton, Austin Nimmo Smith, Captain, R.A.M.C., son of the late Rev. R. Nimmo Smith, LL.D., and of Mrs. Nimmo Smith, to Muriel Alice, daughter of Dr. R. Ackerley, of Llandrindod Wells.

Deaths.

BARKER.—On April 8th, of acute pneumonia and nephritis, Colonel A. E. J. Barker, A.M.S., in his 66th year.

CROSBY.—On Friday, April 7th, after a few days' illness, Sir Thomas Boor Crosby, Alderman for the Ward of Langbourne, in his 86th year.

HAWKSLEY.—On April 4th, Walter Linney Hawksley, Major R.A.M.C., eldest son of the late Dr. and Mrs. Hawksley, of Southport, aged 33 years.

PHELPS.—On April 8th, at Baxter Gate, Loughborough, Philip Phelps, M.R.C.S.Eng., F.R.C.P.Edin., L.M., aged 63,

SIMPSON.—On April 6th, at Edinburgh, Alexander Russell Simpson, Kt., M.D., D.Sc., LL.D., Emeritus-Professor of Midwifery in the University of Edinburgh, in his 81st year.

STRICKLAND.—On March 25th, at Naringla, Craneswater Park, Southsea, Fleet Surgeon Charles C. Strickland, R.N. (retired).

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, APRIL 19, 1916. No. 16.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

The Central Medical War Committee.

LETTERS on the subject of the Central Medical War Committee continue to reach me in considerable numbers. The writers all express their cordial approval of the attitude which the MEDICAL PRESS AND CIRCULAR has adopted; some of them ask questions, but not one of them expresses dissent from the views which have been reflected in these columns. This last statement requires this saving clause. From Ireland have come some very vigorous protests, dictated by the mistaken assumption that my remarks concerning the Central Medical War Committee included reference to the body which is recruiting and enrolling the medical profession in Ireland. I thought that two disclaimers on this subject would be sufficient, but in that I was apparently mistaken. To all whom it may concern, then, I say, for the third time and last time, that my criticisms and remarks concerning the Central Medical War Committee referred to that body and to that body alone. It was born of the British Medical Association, it sits at 429, Strand, London, W.C., and it has for its Secretaries, Dr. Alfred Cox and Mr. Bishop Harman.

Some Questions.

SOME of the questions which I have been asked arise from a careless reading of what I wrote; but one of them, which recurs with a disconcerting frequency, derives from an equally disconcerting accuracy. This question demands to know what I meant by saying that medical men were specifically excluded from the operation of the Military Service Act? Well, let me at once admit that I was misinformed when I made that statement. Medical men are not so excluded, save in a very limited sense, and that sense is administrative only; it is not legislative. Under the Act the authorities may call up all medical men of military age to serve as combatants; but they cannot call up medical men to serve as medical men. A doctor may join as a combatant, but if he wishes to join *quâ* medical man, then he must enrol with the Central Medical War Committee. Either that, or he can apply directly to the Medical Authorities at the War Office.

Committee of the Royal Colleges.

THE Central Medical War Committee (429, Strand: Secretaries, Dr. Alfred Cox and Mr. Bishop Harman) remains the unsatisfactory body that it was. It is true that an Advisory Committee appointed jointly by the Royal College of Physicians of London and the Royal College of Surgeons of England is now in existence; and there is no doubt that this Committee will serve to give confidence to the profession. That the newly-appointed Committee has not very much confidence in the Central Medical War Committee (429, Strand: Secretaries, Dr. Alfred Cox and Mr. Bishop Harman) is evident from the following resolution passed on March 17th at a Comitia of the Royal College of Physicians. I quote from the *Lancet* of March 25th, p. 682. The italics are mine. "That this College is willing to join the Royal College of Surgeons in forming an Advisory Committee to give advice to the Government in relation to medical practitioners in the metropolitan district required for service in the Army, and also to advise on cases of special difficulty elsewhere in England and Wales. *Such advice to be communicated through the Central Medical War Committee, without alteration, to the Government departments concerned.*"

The Age Limit.

A QUESTION which I have been asked, to which I can find no satisfactory reply, is this: "Who raised the age for medical officers in the Army from the 40 years of the Military Service Act, to 45?" I presume it was the Central Medical War Committee (address and secretaries as above), and I should be interested to know by whose authority this was done. To summarise the answers which I might have to give if I replied to each enquirer in detail, let me put the matter thus (some of it is repetition, but apparently it is very necessary repetition): The enrolment pledge is given, not to the King, or the Government, or the War Office, but to the Central Medical War Committee (429, Strand: Secretaries, Dr. Alfred Cox and Mr. Bishop Harman). The invitation to men over 40 so to enrol is purely gratuitous, and cannot possibly be enforced; nor can the invitation to married men under 40 be enforced. In the case of specialists, members of the staffs of hospitals, metropolitan or

provincial, or anyone else not ordinarily circumstanced, care should be taken to ensure that the special features shall be duly considered before the individual is induced to enrol. In principle, enrolment is a good and even a necessary thing, but so long as the ultimate decision rests with the self-appointed Committee which sits at 429, Strand, and has for its Secretaries Dr. Alfred Cox and Mr. Bishop Harman, so long will members of the profession who are not members of the British Medical Association be held excused for declining to be drawn into the net.

Sir Arthur Markham and Others.

Mr. H. A. Barker ought to be very much gratified by the testimonials to his skill (they are surely unsolicited) which continue to burst forth from people—presumably beneficiaries—speaking in Parliament and writing in the Press. Sir Arthur Markham has been beating the drum in Parliament; the Editor of *Truth* has taken up the parable; and Mr. H. G. Wells has contributed to the *Daily Mail* a deplorably stupid letter on the subject. Sir Arthur Markham need not, of course, be taken seriously; his recent public appearances have not added to his credit, and this attempt to obtain War Office recognition for an unqualified practitioner will scarcely rehabilitate him in the estimation of sensible people. Mr. Tennant's very proper and very pertinent reply was that, if he were to allow an unqualified practitioner to operate on soldiers, the House of Commons is the first place where he would be arraigned and denounced. Let us hope that the House will continue in this spirit of sanity.

"Truth."

"Truth" is a paper which in former times used to be conspicuous for its sturdy and independent commonsense, and I am bound to admit that it still exhibits these qualities in a general way. In the present instance, however, though the sturdiness and independence may be there, the commonsense is not. What, for example, could be more nonsensical than the proposal contained in the following paragraph?:—

> "One remedy for this state of things is that there should be a power outside the medical faculty of granting the formal qualification which entitles a man to be registered. For example, the power might be given, under suitable safeguards against abuse, to the Home Secretary or the President of the Local Government Board. It would not be difficult to frame and pass an Act for this purpose, even at the present time."

A much simpler remedy for "this state of things" would be for Mr. H. A. Barker to obtain the necessary licence to practise surgery. In the case of such a heaven-sent genius, the examinations—which, after all, demand the very minimum of knowledge—could present no difficulty whatever. Why on earth does he not pass them?

Mr. H. G. Wells' contribution.

But the gem of the literary contributions to this silly subject is from the pen of no less an author than Mr. H. G. Wells, who, under the title of "The Medical Muddle," writes the following letter to the *Daily Mail*:—"Of one trade union at least the Government is too afraid to dare to use non-union skill, and that is the medical trade union. Mr. H. A. Barker, the bonesetter, has offered his services free to the country, and they have been rejected. There is no doubt in my mind that this refusal means that a great number of men will be unable to go to the front who might otherwise do so, and that there will be a number of men permanently and needlessly disabled for life. All to the greater glory of that ancient guild of medicine, which nevertheless lets loose a horde of 'qualified' ignoramuses upon our population. This is a matter upon which I have special knowledge; I know the atrocious incapacity of the general practitioner, and I know the peculiar skill of Mr. Barker. If it were not for him, if I had trusted to the sort of man the medical profession endorses, I should be an ailing cripple to-day. Clyde tactics are an intolerable disloyalty in these days of urgent need. The Army medical authorities have no more right to waste Mr. Barker's skill and patriotism in this fashion, on a purely technical point, than malcontent strikers have to keep good machinery idle. They deserve a common goal."

The Profession as a Trade Union.

This is a very fair specimen of the kind of irrational and senseless tomfoolery into which an able man may be betrayed when he barges into an intricate domain with nothing better than impatience, ignorance, and prejudice to guide him. If Mr. H. G. Wells knew anything whatever about matters medical, he would not make the egregious mistake of stating that the medical profession is, in any sense whatever of the term, a trade union. For that is precisely what it is not. Its members are made to toe an examinational line, not for their own protection, but for the protection of the public; and the toeing is imposed upon them, not by the other members, but by the statute. Having expended five years of his time and a considerable sum of money in toeing the line with success, a doctor is not in any way protected by law from the competition of the free-lance; who, having escaped the mill of dissecting-rooms, laboratories, lectures, wards and examinations, manages to persuade an impressionable and credulous public that he has been endowed from on High with knowledge without study, skill without practice, and the power to perform miracles without the previous laying on of hands.

Ignoramuses.

Mr. H. G. Wells asserts that this "ancient guild of medicine lets loose a horde of qualified ignoramuses upon our population." Well, for the sake of argument, let us suppose that such is the case, which in reality it most emphatically is not. Is it contended that the lot of the suffering population will be improved by abolishing the necessity for qualification? Is a man any more of an ignoramus for having passed examination tests? If not, what is Mr. H. G. Wells' remedy? Mr. Wells goes on to say that the Army medical authorities have no right to waste Mr. Barker's skill. How do the said authorities know that Mr. Barker is endowed with this exceptional skill? He appears never to have subjected himself to any examination. Had he done so, with this extraordinary skill, he surely would have passed. There is therefore no official evidence upon which to rest any confidence in this alleged skill. The only sort of testimony on the subject is the enthusiastic testimony of such as Sir Arthur Markham, Mr. H. G. Wells, the Editor of *Truth*, and some celebrities who write from Upper Tooting to the *Star*. Where health is concerned enthusiasm is a very poor substitute for knowledge; nevertheless, it is on showing such as this, that the law is to be altered, the necessity for a diploma to be removed, and unqualified practitioners are to be turned loose on the Army. Was there ever such preposterous balderdash?

Wittenberg.

The name of Wittenberg will go down to posterity as that of the foulest and most loathly crime which has ever disgraced the annals of medicine, and the name of Aschenbach as that of the most callous, cowardly and contemptible monster who has ever dishonoured the title of doctor.

Sinapis.

OF ARTERIAL DISEASE.

The purposeful artistry which Nature everywhere displays, is nowhere better exemplified than in the distribution of the conduits which carry the blood from the centre to the periphery. The physiological integrity of the conduits is almost as essential to freedom of soul and body as the purity and sufficiency of the blood itself. With the grosser composition of the circulating fluid we are familiar; of its subtle essences we know nothing. To what extent and through what agencies it brings gradual destruction upon its conduits is a question which has occupied some of the best minds in all ages, and is still unsolved. With the grosser composition of the walls of the arteries we are also familiar. Concerning adventitia, media and intima there is anatomically and physiologically little that we do not know. But no sooner do these enter the domain of pathology than we are undone. In spite of much laborious work, the riddle of arterial disease still awaits solution.

Sir Clifford Allbutt's book (*a*), which more perhaps than any other, has suffered from being a war baby, is a contribution to the study, if not to the elucidation, of the many fascinating problems which this question englobes. The examination and discussion of these problems could not have been undertaken by anyone more suited to the task than the learned Professor of Physic at Cambridge; for, almost alone among present-day writers, he is gifted—in a very high degree gifted—with the special qualities which render such a discussion tolerable. To say that the discussion is exhaustive would be more than partially to conceal the fact that it is discursive. Discursive it is, but that does not prevent it from being delightful. To say that its conclusions are hesitating would be true, but the hesitation is essentially that of the true scientific spirit. Scholars and intellectuals are always inconclusive, and not infrequently ineffectual: their deductions are born of a higher sphere, are reared in a more rarefied air, than the dogmatisms of lesser minds. It is only to the ignorant, in pathetically fruitless search of certainty, that inconclusiveness appears to be a vice. In a text-book it is insufferable; but in an essay it is often a tributary to the full stream of pleasure. When you have read this particular essay you close the second volume with the satisfaction of having read all that can possibly be written on the subject of arterial disease, but the satisfaction is leavened with the chastening conviction that you know nothing whatever about it. And yet you are delighted. In all good writing—and Sir Clifford Allbutt writes nothing that is not superlatively well written—there is a sense of reserve. The artist in words seems to say a great deal, and yet, to the discerning eye, he obviously says less than he would like to say. He displays the church, but the steeple of his experience-ripened thought is more than half-reluctantly concealed. On occasions all too rare does he take his reader into his real confidence. He always appears to be doing so, but that is only a part of the charm of good breeding and the grand manner. Back, as the Americans say, back of all this seeming discursiveness which would suppress nothing which others have contributed; back of this baffling inconclusiveness, there sits a conclusion which is never quite revealed. There is a veil past which we cannot see, and yet we do not repine: for the grand manner in matters medical is full of compensations, if only for its contrast to the shallow mechanical pronouncements and dreary illiteracy of the ordinary text-book.

Angina pectoris is to a very large extent a function of arterial disease, and the last 200 pages of the second volume of Sir Clifford Allbutt's book are devoted to a consideration of this "appalling and picturesque disease," as Sir Richard Douglas Powell calls it, "about which a certain glamour has been cast by the many noble and distinguished lives it has stricken down." From a perusal of these 200 pages you arise puzzled, perplexed and distracted, but with a pleasing sense of stimulation, and a consciousness of literary enjoyment which includes wonder. The chapter on the "Causes of Angina Pectoris" (page 249) begins with these words: "Angina is by no means unknown in the aged and decayed, but its greater prevalence is at a somewhat earlier stage, in the years of senescence; in senectus, not in senium." On page 285 there is the following passage: "If now we turn from the site to the degrees of pain, I would urge that, if in one extreme the pain is ruthless, such that the patient feels as if 'the life were being squeezed out him,' if, as no other pain, it racks the very depths of anguish, and in its reiterating paroxysms of torture and dismay seems to be more than flesh and blood can bear, and if in the severest cases a 'status anginosus' may bait the sufferer, making him as one of the older writers says, 'furibundus,' for hours or for days—for days in one of Heberden's cases—yet in other cases its passage may be so light and transient as only too often to escape serious attention, yet, even in these minor skirmishes, it brings with it a peculiar malice, a warning innermost touch; incomprehensible, vaguely startling." Such phraseology is magnificent, so magnificent that we are apt to lose sight of the substance in our admiration of the form. It is caviare of a very high refinement, and as such, may all too easily prove its own undoing. For while illuminating, it seems to obscure; and while encouraging, it disheartens.

As in arterial disease then, so in angina pectoris, we are filled to overflowing with the potential details, we are indeed satiated therewith, but the garment of our knowledge is still depressingly shapeless, without form and void. The elements of this "appalling and picturesque" jigsaw are all here, vaguely gyrating under our prentice hands, but the master hand which is to introduce balance, proportion and perspective, alas! it still tarries.

L. B. W.

(*a*) "Diseases of the Arteries including Angina Pectoris," by Sir Clifford Allbutt, M.A., M.D., F.R.C.P., F.R.S., Regius Professor of Physic in the University of Cambridge. 2 vols. London: Macmillan and Co., 1915 (price 30s. net).

Brixton Dispensary is appealing to residents to send along old medicine bottles.

CURRENT TOPICS.

Heliotherapy.

In our struggle towards the light it is possible that we may have forgotten the sun. Immersed in our labour, beset with a myriad details, we have ceased to raise our heads for even a moment. Years have rolled on into centuries, therapy has succeeded therapy, infections have disappeared or become modified, but the same ceaseless battle beats about the world, the conflict with suffering and disease. And throughout the æons the untiring, patient, all-embracing, all-sufficing sun has risen and set, has passed through his eternal wheeling circles in the æther, a great neglected doctor, slighted, but enduring his slight in serenity and silence, awaiting his hour.

To-day we are told that he may be about to come into his own. In Switzerland and in America a variety of lesions perish under his penetrating eye. As a therapeutic agent in dermatology, the X-rays pale beside his effulgence. Cervical adenitis, tuberculosis, neurasthenia—nay, even in the healing of wounds—his unimpaired and unhindered activities act like a charm. It is permissible to us in the present age of remedies, when "each minute teems a new one," to be sceptical; but perhaps in this single instance we may be entirely wrong. That so central and dynamic a force—so conserving a medium—to which the void and the planets instinctively respond, should have an inhibitory power upon disease is not illogical. It is only one expression of the eternal fact, human and divine, that darkness of necessity perishes before the light.

Cultivation of Medicinal Herbs.

Mr. E. N. Holmes, curator of the Pharmaceutical Society's Museum, gave a lecture on the cultivation of medicinal herbs in Great Britain at the headquarters of the Royal Horticultural Society on April 11th. He said that hitherto we had depended mainly on Germany and Austria for our supply of medicinal herbs, and it was difficult to understand why there should be any necessity to import herbs that grew wild in this country. It seemed absurd to import coltsfoot by the ton when every clayey railway bank or heavy waste-ground was covered with the plant. In Germany children were taught to recognise and collect medicinal herbs that grew near their homes; these were dried in small quantities in sheds or attics, and probably finished off in farmhouse bread ovens after the removal of the bread. In the absence of any system of collection in this country vast quantities of valuable herbs were left to waste. He showed how we could become independent of Germany for our supplies of two of the most valuable drugs known—namely, belladonna and foxglove. Belladonna was found in twenty-eight British counties. An enormous increase in the yield could be obtained if the head gardeners on estates where it grew wild were instructed to distribute, in April, all seedling plants to other positions in the same woods, since the seedlings were often too crowded. If this were done and the plants cut at the proper time and sold to the agents of wholesale drug firms, there would be no need to import belladonna, and it was quite possible that there would be a sufficient supply even for export to those of our Dominions where the climate and local conditions prevented its successful culture. There was an enormous quantity of foxglove growing wild in damp, hilly woods in this country, and if large landowners, whose soil was silicious, would give instructions to their head gardeners to plant out the young plants or scatter the seed in autumn in fresh localities there would be no necessity to import foxglove from the Continent. Speaking of the cultivation of culinary herbs, such as sage, mint, angelica, basil, thyme, and other sweet herbs, he stated that the only way to make it pay was to increase the quantity of any herbs that suited the soil, dry it, and forward it to a central warehouse. The lecturer urged that a tariff should be imposed on imported medicinal herbs, otherwise it would be impracticable by most of those who had begun their cultivation in this country in war-time to reap a benefit for their outlay.

The Full Life.

The old proposition that we eat to live, and the denial of the reverse, are alike commonplaces. If we phrase it rather "man works to live, but does not live to work," we fear that a democratic support may be lacking. Work for work's sake has burnt itself into the human brain as something worthy of admiration and emulation. Nowhere has it held such spacious court as in the American mind—heretofore. Yet out of America now comes a cry of protest. In the year 1880, twenty-one per 10,000 people succumbed to the cardio-vasculo-renal syndrome so strongly associated with mental hyperactivity and anxiety. In 1910 the figure became 39, 50 per cent. higher than that of England and Norway to-day, from the same cause —mental strain and tension. Let us be wise in time, if it so be we may. Our destiny, physiological and spiritual, is not to be fulfilled merely by cramming as much specialised effort as possible into the twenty-four hours consecutively. There are relatives, friends, the air and the earth. The unfortunate element is, however, that our relaxations under such circumstances are of themselves of a condensed and hastened nature. What we lack is leisure—the sly schoolboy humour of Horace, which faintly shrugs its shoulders, bids professional cares begone to the devil, whence perchance they came, and ejaculates :—

"Dulce est desipere in loco."

Surgery or Pruning.

Sometimes we feel that there is much to be said for the popular conception of a surgeon—a man who rejoices in the sight of blood, takes pleasure in cutting off a limb, whose mind is of a type but little removed from that of a butcher. This idea is widespread amongst the less completely educated of our public. It can hardly be without foundation. All they know of the surgeon is that after his ministration some relative or friend returns home minus a diseased limb or a swollen goitre or a cancerous breast. What is a surgeon but one who hacks away these troublesome appendages? We wonder are they altogether wrong. Is there never a time when we choose the simpler way of removal rather than the difficult and tedious path of preservation? There are few of us who do not view with some distaste the necessity for the amputation of a limb or other mutilation of the symmetry of the body, but are we always so anxious to preserve the unseen and hidden things of nature? Hysterectomy is so much easier than a troublesome myomectomy, a tonsillectomy so much the most obvious way of curing tonsillitis. We are glad to see a plea for

the conservative treatment of tonsils by Dr. Hudson-Makuen, of Philadelphia, in a recent number of the *New York Medical Journal*. He maintains that time and again the opening of a pocket in a tonsillar crypt will give as good a result as the complete removal of the gland. His criticism is that the latter procedure is often unnecessary, and may be even harmful, although the immediate results will appear satisfactory. The radical operation, he says, ought to be the exception rather than the rule, and "the man who tonsillectomies a dozen or fifteen patients in a single afternoon had better spend his afternoons in an abattoir."

Soldiers' and Sailors' Dental Aid Fund.

The Committee of the above Fund informs us that its work is terminated as from March 11th, 1916, Sir Arthur May, K.C.B., Medical Director-General of the Admiralty, has informed the Committee that the Admiralty has now decided to supply artificial teeth, if necessary, to all sailors and recruits for the Navy.

Sir Alfred Keogh, K.C.B., Medical Director-General at the War Office, has informed the Committee that the War Office has decided to supply artificial teeth, if necessary, to all Overseas men, and further, as he does not consider it necessary for the Home-service Army to have artificial teeth, he can no longer allow the Fund to use the words, "Authorised by the War Office."

In view of these statements the Committee has no alternative to the course it has taken, though it much regrets that Sir Alfred Keogh should have withdrawn his sanction of the work done on behalf of the Home Army.

The Committee, nevertheless, can congratulate itself upon the success of its efforts on behalf of the two services and the appreciation of its work constantly expressed by the Authorities.

The Secretary, Miss Fletcher, draws our attention to the following facts :—

Since its inception, the Fund has dealt with over 11,000 fighting men, and it has done this without paying (*a*) any salaries, (*b*) any rent, rates or taxes, (*c*) and, owing to the great patriotism and courtesy of the Press (together with members of the Fund paying for small advertisements), any expenses in advertising.

Since November, 1915, the Committee alone have paid for all the artificial teeth for the home-service men. She points out that the War Office now gives artificial teeth to all the Overseas men, and that the Admiralty are now giving artificial teeth to all the sailors and recruits for the Navy.

The Dangers of Gratuitous Work.

The generous way in which the medical profession of the United Kingdom has given its services to the nation in the past two years is not without its dangers to our future position. What has been given as a free gift is likely to be accepted as if it were a right. In the Red Cross Hospitals our wounded are being treated gratuitously by surgeons and physicians; in the general hospitals the medical staffs are giving their services without fee or reward. From the economic point of view we fail to find any justification for this. The care of the wounded soldiers and sailors is just as much a charge on the State as the feeding and maintenance of the men in the field and on the seas. But no one expects the baker or the clothier to supply his goods gratis as a contribution to the State. Medical men, however, must be careful that their free-will offering remains a free-will offering, and that those who are not in a position to offer their services gratis are not subjected to attack for exercising their rights. A scandalous instance of abuse of medical men for exercising their undoubted rights in this matter has just occurred in Belfast. It appears that the Belfast Guardians have given hospital accommodation to a number of wounded soldiers, and that the necessary treatment has been given by the workhouse medical staff. The sum paid by the military authorities to the Guardians is admittedly more than is required for the maintenance of the patients, and in those circumstances the medical staff has made the natural demand that they should get some remuneration for their services. The payment asked is trifling, but for this entirely equitable demand they have been subjected to gross abuse and criticism, chiefly on the ground that "other doctors—the most eminent men in the city" were doing similar work without pay. If our generosity is to be made a justification for refusing our rights, we may be forced to consider whether our generosity is wise or just.

Cardio-vascular Complications in Paratyphoid.

Dr. Minet, at the Society of Medicine, gave an account of 19 cases of paratyphoid infections, which showed that paratyphoid, just like typhoid infections, may affect the cardio-vascular apparatus. They may cause phlebitis of the "phlegmasia alba dolens" type, often myocardiac insufficiency, and even chronic myocarditis. This proves how erroneous is the idea that paratyphoid infection is merely an attenuated typhoid infection.

PERSONAL.

Dr. Frederick Taylor has been re-elected President of the Royal College of Physicians.

Sir Frederick W. Hewitt, M.D., M.V.O., Anæsthetist to the King, left £35,378.

Dr. Norman Moore has been re-elected a representative of the Royal College of Physicians on the General Medical Council.

Dr. David Hooper, formerly Curator of the Economic and Art sections of the Indian Museum at Calcutta, and a collaborator of the late Brigade-Surgeon Dymock in the compilation of "Pharmacographia Indica," has been elected president of the British Pharmaceutical Conference. Dr. Hooper was at one time quinologist to the Madras Government, and in 1907 was the recipient of the Hanbury medal.

Dr. Lawrence Blandford, who has been promoted Assistant Director of Medical Service with the rank of temporary colonel in the First Mounted Division, is a well-known Tees-side medical man, and the only son of Dr. Blandford, of Stockton. He was prominently identified with the Territorial Force, and on mobilisation he was called to the staff of the Northumbrian Division as sanitary officer. When the Division proceeded to the front last April he was appointed Deputy-Assistant Director of Medical Service.

Lieutenant-Colonel Robert Jones, R.A.M.C. (T.), lecturer on orthopædic surgery at Liverpool University, has been appointed Inspector of Military Orthopædics. The duty of the inspector will be to supervise the treatment in various military hospitals and sections of hospitals set apart for orthopædic cases, the first of which will be the Hammersmith Military Hospital. The buildings, consisting of the Hammersmith Infirmary and Workhouse, will hold about 800 men, and there will be departments for whirlpool baths, massage, and other forms of special treatment, in addition to a large gymnasium. The British Red Cross Society is helping to provide the equipment.

CLINICAL LECTURE

ON

TWO CASES OF MALIGNANT DISEASE OF THE BODY OF THE STOMACH.

By WILLIAM RUSSELL, M.D., F.R.C.P.Ed.,

Professor of Clinical Medicine in the University, and Physician to the Royal Infirmary, Edinburgh.

The patient, whose case I shall presently give you in brief outline, provides us with a motive for considering the steps by which a diagnosis of malignant disease of the stomach may be reached. From this consideration is excluded malignant disease beginning at the pylorus, with resultant early obstruction and retention of stomach contents. The case which is taken as the text is one in which the body of the viscus is affected, and in which neither the inlet nor the outlet is encroached upon. The case presents a sequence of phenomena, as these are presented in the patient's history, of malignancy at the fundus following close upon hyperchlorhydria and the healing of a pyloric ulcer.

Case 1.—John R., æt. 47, coal miner, recommended by Dr. Miller, Tranent, was admitted on January 8th, 1916.

Complaint.—He complained of a dull pain about the level of the umbilicus, which sometimes went through to the back and extended across the abdomen. The pain caused nausea, but he had not vomited.

History of Stomach Symptoms.—In November, 1914, he began to suffer from a dull pain in the epigastrium, and extending to the right and the left. He would have the pain for a few days, and then he would be a few days without it. With the pain there might be a feeling of sickness. The pain was worse when the stomach was empty, and it was relieved by taking food. In February, 1915, the exact day being unimportant, he suddenly one day felt faint, and fell down apparently in a faint. He was put to bed, and when he recovered from the faint he vomited dark-brown material. In a day or two he passed black-coloured motions. The doctor told him he had a gastric ulcer. He was kept in bed for three months, during which time the abdominal pain gradually lessened and finally disappeared. After the lapse of five months he felt well enough to return to work. Having worked for six weeks he began to have pain, which he referred to the heart, but which we may assume meant the fundus of the stomach, palpitation and breathlessness. He stopped work, and was off work for six weeks, part of the time being in bed. On September 6th, 1915, he was sent to see me at the Infirmary. He then had pain in the epigastrium extending laterally. He had sometimes nausea and fluid eructations. The pain was relieved by taking food. The bowels were regular. Nothing abnormal was made out on examination of the abdomen, and there was no gastric dilatation. I advised that he should be treated as a case of hyperacidity. The treatment gave so much relief that he was able to return to work, and he worked for several weeks. But he had to give up work again on account of the pain, which he again referred to his "heart," palpitation and breathlessness. The doctor's medicine again relieved him. About the middle of December he began to locate his pain in the umbilical region. The pain was persistent and constant up to the time of admission, and continued constant during the week he was in the ward. He had lost 19 lb. in weight since June last.

Examination on Admission.—He was spare, but not emaciated. His colouring suggested not only some anæmia, but cachexia. The abdomen was the only part of the body that required special consideration, as the other systems were normal.

Examination of Abdomen.—Again I seek to impress upon you the importance of learning to examine the abdomen methodically and correctly. In this patient, inspection to the educated eye showed a slight prominence in the left epigastrium extending to the costal margin. The prominence did not protrude more than half an inch, and it was about three inches or less across. Peristaltic movements were not seen anywhere. On palpation there was a distinct sense of resistance over the elevated area, and the sense of resistance extended over the adjoining ribs. A lower limit to the area was palpable. On percussion the normal area of fundus tympanicity was wanting; heart dulness was continuous, with the dull note over the area indicated.

Let us look at the significance of these observations. A slight projection leads you to palpate the projecting area, and there is found to be a sense of resistance: in palpation of the abdomen there is a wall resistance and an internal or deep resistance. The resistance in this case was not the resistance of a segment of contracted rectus muscle; it was deeper, its lower limit was definite, and the sense of resistance extended over the adjoining ribs and spaces. The sense of resistance in this area was quite different from that of the corresponding area on the right side. This area was also dull on percussion, and the dulness was continuous, with the dull note over the area where fundus tympanicity is normally present. The absence of this area of tympanicity is often an important point in the investigation of stomach conditions, and its absence or presence is to be noted as well as any extension of the area. In a case of the kind we are considering the two available explanations of the dulness were that it was due to an enlarged left lobe of the liver or to the thickened anterior wall of the stomach. The latter explanation easily obtained priority by the obtaining of a squeaking or gurgling sound when palpating the swelling—such a sound as is obtained by squelching the stomach when it contains a little air and a little semi-fluid food. We were fortunate in examining at a time when this phenomenon was obtainable. Once it is felt there need be no doubt as to the seat of its production; it cannot be produced in the liver, its position is too high for the transverse colon, and manipulation of the colon only gives it when the colon contents are semi-fluid, as after a dose of saline. The physical examination of the particular region thus provided evidence pointing to the anterior wall of the stomach as being thickened and infiltrated, and perhaps even adherent to the parietal wall. Palpation further revealed enlargement of the glands above the left clavicle. A test meal showed entire absence of free hydrochloric acid in the stomach. The general observations made regarding the patient's condition were that he had lost considerably in weight within

recent months, that there was a progressive sense of loss of strength, that there was not only a certain measure of anæmia present, but there was a face colouring which suggests not anæmia only, but anæmia plus cachexia.

Diagnosis and Remarks.—From these data we conclude that this patient has malignant disease of the fundus of the stomach, that the enlargement of the supra-clavicular glands points to a wide involvement of internal glands, and that therefore surgical measures need not be considered. I particularly want you to note that the methods which provide the data on which the diagnosis is based in this case are not difficult to acquire some skill in. You must not, however, think that you have only to place your hand on the abdomen to discover all that can be made out. It requires careful and critical training on your part to attain to that; I can only show you how I do it, and tell you what I feel, and it is my duty to give some of you the opportunity of doing these things under my own eye. The skill is attainable by every one of you.

Although this is strictly true, there are factors of experience and of judgment which enter very specially into the problems of abdominal diagnosis. In the case we have been considering there was first a diagnosis of gastric disorder, then of hyperchlorhydria, of ulcer, of healed ulcer. Then comes a change in the symptoms: there was a general deterioration, manifested by evidences of debility, not present in mere functional disturbances of gastric function. Then there was the result of physical examination, the recognition of a swelling which we decided was in the stomach wall, and that such a swelling was almost certainly malignant, and that that view was strengthened by the presence of enlarged glands and no free HCl in the stomach. I have thus shown you the steps by which a decision was arrived at—by a combination of observations, no one of which is in itself pathognomonic of malignant disease, and yet which can be so fitted together that the trained judgment hardly hesitates as to the verdict. Even if part of our mental visualising were proved to be inaccurate, the main conclusion, that the case was one of inoperable cancer of the fundus end of the stomach, would, we believe, be confirmed.

In further illustration of the subject I have been expounding to you, I ask your attention to the facts of another case just admitted to my female ward

Case 2.—Mrs. C., æt. 63, admitted on January 15th, 1916, was sent to me by Dr. Melville, Penicuik. She had been under treatment for stomach symptoms for some months without material improvement in her condition.

History.—During last summer she had suffered very greatly from flatulence, a new experience to her, for she had never been ill. In August, after a day in Edinburgh, she was very "done up." From the beginning of September she rested and lived on milk, but without improvement. It required very direct questioning to bring out the significance of those early months. She denied having suffered any pain or that fluid material was ever eructated. When asked about her appetite, she granted that it was not good at that time, that she had no desire for food, and that therein lay a difference from her ordinary condition. When asked if she felt she was weaker at that time, she granted that she was "not going out so much," as she felt tired after it. She then volunteered the information that she did not always get up to breakfast. In fact, there was a clear history to be wormed out of our patient of a definite and progressive debility, which in her mind was so associated with flatulence, that flatulence became the malady, and progressive debility merely a side manifestation of it, and inevitable. This was the part of the picture, or of the history which required some skill to fill in, and you note the importance of it, for it gives you a picture of the early weeks and months of a stomach cancer in a patient of 63 years of age. This phase continued until November, when vomiting was added to the symptom of flatulence. For a fortnight she vomited every second day, then the vomiting fell to every third or fourth day, and at one time there was no vomiting for three weeks. Then there were daily attacks for a fortnight, followed by ten days of freedom. On January 11th vomiting more severe than ever came on, and she was admitted to the Royal Infirmary on the 15th. The description of the vomited matter was that it varied in quantity from two to four breakfast cupfuls. It was either greyish or brown in colour, of a bitter taste, and sometimes as thick as gruel. There was no feeling of nausea and no pain before vomiting. The vomiting removed a feeling of distension of the stomach which preceded it. The bowels moved fairly regularly, but the dejecta varied in colour and in consistence.

Family History.—The patient's mother died of "blockage of gullet"; a sister died of cancer at the age of 50.

Condition on Admission.—The patient was still plump, although she had lost much in weight. The expression was that of a calm, self-possessed, steadfast character. The face colouring resembled that of the first case I described to you; it suggested cachexia rather than pure anæmia.

Abdomen.—The abdomen was large, and showed considerable fat in its wall. There was a fulness in the right iliac region, not present in the corresponding area on the left side. On palpation in this region, there was a definite elastic swelling, which felt so like a cyst that it suggested either a right ovarian cyst or a displaced and cystic kidney; it was not tender. On examination of the epigastrium, there was palpable what at first was thought to be the liver, but on more careful palpation was clearly not liver. It was a pear-shaped swelling, the thick end of which was to the left; it lay transversely in the epigastrium from the edge of the ribs on the left side. It was not painful on pressure. On percussion the area of normal fundus tympanicity was not only present, but was considerably extended upwards and to the left. During the few days the patient was in hospital there was frequent vomiting, consisting of thickish, grey-coloured material consisting of little pieces of curd of milk, of gruel, or of the starch of bread she ate. At other times it was more fluid and brown in colour. The vomiting was not preceded by pain or nausea, and the vomit was brought up without discomfort. No specimen of the vomited matter contained free HCl. The bowels were easily acted upon by means of water allowed to pass slowly into the bowel from a douche-can. There were no enlarged glands above the clavicle.

Diagnosis.—The diagnosis was malignant disease of the pyloric third of the stomach. The cystic-like swelling in the right iliac region did not, in view of this diagnosis and in the absence of symptoms which could be attributed to it, require further measures of examination, such as cystoscopy or the collection of urine from the individual kidneys. Both Dr. Haig Ferguson and Mr. Dowden kindly saw this patient with me.

Remarks.—The early history of this case as it has been presented to you is not unique: it is a picture of what usually happens in malignant disease of the body of the stomach. Pain is often absent if considerable ulceration or if irritation leading to adhesions to contiguous parts have not occurred. The failure of appetite, the loss of the desire for food,

the slowly progressing debility without any blood lesion beyond secondary anæmia, the loss of weight, the prominence of a gastric symptom, such as flatulence was in this case; and the failure of medical measures to improve the appetite, to stop the flatulence, to arrest the progressive weakness, all suggest to the experienced physician that malignancy is in the background, although there is nothing abnormal to be made out on palpation of the abdomen. A test meal and the examination for free HCl is valuable at this stage, for, if free HCl be absent, it so strongly supports the diagnosis of malignancy that the question of opening the abdomen becomes urgent, in the hope that the condition is so early and is sufficiently localised to allow of its removal by the surgeon. In a case like this there are thus two practical questions set to the clinician: (1) Is it malignant? (2) Is the surgeon likely to be able to remove it? The second question hangs upon the first, and this is why it is so important to make an early diagnosis. The picture I have given you of the first few months of indisposition in a hitherto healthy woman, with no discoverable lesion in any other organ, and who does not respond to intelligent treatment may lead you, ought to lead you, to this point: that your patient is so probably suffering from malignant disease that you have to *prove* the negative; and if that cannot be done, you must remember that a cancer of the body of the stomach can only be removed if taken early. This early period in our patient lasted for fully three months. It was not until November that vomiting became a symptom; once it started it continued, although at varying intervals—every day or two, or even extending to three weeks. The vomiting latterly became more frequent and persistent, while during the days she was in the Infirmary she vomited oftener than once each day. There was no pain before the vomiting, nor nausea, only a certain sense of fulness was relieved by it. It seemed as if whatever nourishment she took accumulated in the somewhat large fundus, and after lying there for a time was simply ejected, while little of it passed along the pyloric end to the duodenum. The state of nutrition warranted the assurance that some nutriment passed. From the history I think it may be assumed that the malignancy did not begin right at the pylorus; had it done so there would earlier have been evidences of pyloric obstruction. As soon as malignancy occurs at the pylorus it gives rise to pyloric spasm, with retention of gastric contents, early gastric dilatation, and vomiting of retained contents. In the present case vomiting was a delayed symptom, and when it did appear it was so regularly and easily accomplished that no great dilatation of the fundus had developed. By the time she was admitted to the ward, the whole pyloric antrum, judging by its uniformly thickened condition, was involved.

As to medical treatment, it is unfortunately confined to amelioration of symptoms, and to giving as much concentrated and predigested or readily digested food as possible. Our first duty as physicians and practitioners is early diagnosis, and I do not hide from you the difficulty of early recognition. The rule to guide you may be laid down as follows:—When patients who suffer from gastric disturbance, and who have been treated along sound lines without benefit, and especially if they lose weight and complain of unwonted muscular debility, it is your duty to no longer assume that the case is only one of ordinary indigestion or dyspepsia, but to have it thoroughly investigated with a view to determine whether or no it is malignant. The methods of examination are palpation, percussion, test meals, and X-ray examination, and the exclusion of disease in other organs which might simulate malignant disease of the body of the stomach. In some cases malignant disease may be so situated in the body of the stomach that palpation and percussion give no data and where the diagnosis is determined by the history and the phenomena grouped round it, and the absence of free HCl.

ORIGINAL PAPERS.

A CONVENIENT RADIUM EMANATION TABLE FOR CLINICAL WORK.*

By WALTER C. STEVENSON, M.D., B.Ch., D.P.H.,

Surgeon and X-Ray Officer, Dr. Steevens' Hospital; Surgeon, Orthopædic Hospital, Dublin; Captain, R.A.M.C. (Temporary).

On November 5th last I had the honour of reading before this section a paper (*a*) on a method of recording radium dosage illustrated by a series of eleven cases treated by one set of radium emanation capillaries in needles. The emanation was used for ten days, till the quantity present was reduced from 37.8 millicuries to 6.2 millicuries. There were fourteen doses administered, and in each dose the average amount of emanation used with the patient had to be calculated by a series of multiplications, the multiplying factor being obtained from a table showing the decline of activity of 100 millicuries at certain intervals of time. Most tables available up to the present seem to be published rather for their academical interest than their practical value. Using even an extended table, such as I showed you, to ascertain the activity of 37.8 millicuries in two days two hours, it is necessary to multiply together 37.8, .697, .9925 and .9925. "Multiplication is vexation," and an approximation is most likely substituted, which in turn is often used as a basis of another approximation. Even if the figures are actually calculated mistakes are liable to occur, as I know to my cost, which will vitiate all the later figures. I have found that all this drudgery is avoided by the use of the table before you, which shows one at a glance not only that the activity of 37.8 millicuries in two days two hours is 25.9 millicuries, but also its activity at any intermediate or subsequent hour.

Some points in the table require consideration. From it, which may not be at first obvious, the hourly decrease of any quantity of radium emanation—that is, after it has reached its maximum four hours after collection—can be read off for an indefinite period.

The table may be conveniently considered under headings I., II., etc.

I. Primarily the table shows the hourly decline in activity of 1,000 millicuries of radium emanation until in twelve days nineteen hours there remains 100 millicuries, or 10 per cent., of the original amount present. The last column in the table has five blank spaces. These spaces may be filled legitimately by the five numbers in the one to five hour lines in the first column by the insertion of a decimal point with one place of decimals. The activity of 1,000 millicuries in twelve days twenty-four hours, or at the end of the thirteenth day, or the beginning of the fourteenth day is 96.3 millicuries. The successive columns in the fifth hour line, with one place of decimals, show the activity at the end of the thirteenth to the end of the twenty-fifth day. Similarly the quantities remain-

* A Paper read before the Surgical Section of the Royal Academy of Medicine of Ireland, January 28th, 1916.

(*a*) "A Method of Recording Radium Dosage."—MEDICAL PRESS AND CIRCULAR, December 8th, 1915.

Table Showing the Hourly Decrease of Radium Emanation after Reaching its Maximum or Radium C Equilibrium Four Hours after the Collection.

Hours.	Days. 0	1	2	3	4	5	6	7	8	9	10	11	12	Hours.
0	1000	835	697	582	486	406	339	283	236	197	165	137	115	0
1	993	829	692	578	482	403	336	281	235	196	164	136	114	1
2	985	823	687	573	479	400	334	279	233	194	162	135	113	2
3	978	817	682	569	475	397	332	277	231	192	161	134	112	3
4	970	811	677	565	471	394	329	275	230	191	160	133	111	4
5	963	805	672	561	468	391	327	273	228	190	159	132	111	5
6	956	799	667	557	465	389	325	271	226	188	157	131	110	6
7	949	793	662	553	462	386	322	269	225	187	156	130	109	7
8	942	787	657	549	458	383	319	267	223	186	155	129	108	8
9	935	781	652	545	455	380	317	265	221	184	154	129	108	9
10	928	775	647	541	452	378	315	263	219	183	153	128	107	10
11	920	769	642	537	449	375	313	261	218	182	151	127	106	11
12	914	763	637	533	445	372	310	259	216	180	150	126	105	12
13	907	757	633	529	442	369	308	257	214	179	148	125	104	13
14	900	752	628	525	439	366	306	255	213	178	147	124	103	14
15	894	746	623	521	435	363	303	254	211	176	146	124	103	15
16	887	741	619	517	432	361	301	253	210	175	145	123	102	16
17	880	733	614	513	428	358	299	250	208	173	144	122	102	17
18	874	729	609	509	425	355	297	248	206	172	143	121	101	18
19	867	724	605	505	422	352	294	246	205	171	142	120	100	19
20	861	719	600	501	419	350	292	244	203	170	141	119	—	20
21	854	713	595	497	416	347	290	242	202	169	140	118	—	21
22	848	708	591	493	412	344	288	240	200	168	139	117	—	22
23	842	702	587	490	409	342	285	238	199	166	138	116	—	23
24	835	697	582	486	406	339	283	236	197	165	137	115	—	24
	1st day	2nd day	3rd day	4th day	5th day	6th day	7th day	8th day	9th day	10th day	11th day	12th day	13th day	

Note.—The first column of the table is a copy of Rutherford's figures published in 1912. The successive numbers can be obtained by multiplying by .99253, which factor therefore represents the relative amount of emanation remaining at the end as compared with the quantity at the beginning of each hour.

The numbers in the first and last lines—the same numbers as these represent the amounts remaining at the end of each day or the beginning of the next—are taken from Colwell and Russ (1915).

The remaining numbers are calculated or averaged.

When the table was finished it was found that the numbers for the 14th, 16th, 18th, 20th, 24th, and 30th days also agreed with those of Colwell and Russ.

In each number the first two figures are on the whole accurate, the third is an approximation to the nearest whole number. The units figure is the cause of some apparent discrepancies, and reduplication of some numbers on the table. Thus the two consecutive 129 shown might represent 129.49 and 128.51, each an error of less than half per cent.

When using the table, the first or 0 hours line is always disregarded, as it is the same as the last or 24 hour line.

ing at the terminations of the twenty-sixth to the thirty-eighth days are found in the successive columns of the ten hour line with two decimal places, and of the thirty-ninth to the fifty-first days in the fifteenth hour line, with three decimal places, and so on. In fact, provided the 10 per cent. reduction takes place in exactly twelve days nineteen hours the table shows correctly that in a year 292×10^{-27} millicuries remain.

II.—The table deals with 307 hours and contains 301 different numbers. It is obvious that the hourly decrease of activity of the amount of emanation corresponding to any of these numbers —and also these numbers multiplied or divided by 10 and its powers by the addition of noughts or decimal points—may be read off directly from the table. It is immaterial therefore whether the maximum amount of emanation is 1,000, .267, 2,610 or 116 millicuries, as all these numbers are represented on the table. Thus, .672 millicuries at the end of an hour will be .667, and at the beginning of the ninth hour will be .633 millicuries, while in 24 and 48 hours respectively there will be .561 and .468 millicuries—that is, the figures on the same line but in succeeding columns.

Again, the hourly decrease of a maximum of 116 millicuries may be traced directly for 20 hours till it reaches 100 millicuries, and the quantity present at the end of the 21st hour is shown by dividing by 10 the number in the first hour line in the O day or the first day column, and is 99.3 millicuries. The amount at the end of the first and each succeeding day to the thirteenth is shown in the 4-hour line.

III.—When a supply of emanation at the time of its maximum does not correspond to a number on the table, it is obvious that in less than an hour later the amount remaining will correspond to the next lower number. If it is assumed—which, for practical purposes it may be—that during one hour emanation decreases at a uniform rate, and not exponentially, it is easy to calculate when the next number will be reached. If this time and number are substituted for the time of maximum and the amount supplied, the table may be used as before. Thus, a supply of emanation is received which reaches its maximum of 64.4 millicuries at 4.21 p.m. A reference to the table shows the numbers 647 and 642. Their difference, 5, is the amount lost in an hour, or a unit is lost every 12 minutes. At 4.45 p.m., therefore, the activity of 64.4 millicuries will be 64.2, a number on the table from which its hourly decrease, reckoned from 4.45 p.m., may be traced. In effect, in order to co-ordinate a supply of emanation with the numbers on the table, it is sometimes necessary to compensate a slight loss of activity by a small gain in time.

IV.—In using the table, it is immaterial whether the activity of the emanation is estimated in millicuries—*i.e.*, in equilibrium with Ra, radium element, or as being in equilibrium with a radium salt. As the relative activity of emanation measured by the various standards is constant, so

the hourly decrease in activity will conform with the numbers on the table.

As has been pointed out on a previous occasion (1), in recording dosage it is a decided advantage to adhere to the millicurie and radium element standard as the most uniform, logical and generally convenient standard of measurement. Emanation in equilibrium with the radium salts below may be reduced to millicuries, or *vice versa*, by employing the following formula:—

	Millicuries.				
Ra	$RaSO_4$	$RaCl_2$	$RaCl_2.2H_2O$	$RaBr_2$	$RaBr_2.2H_2O$
1	1.424	1.315	1.474	1.723	1.81

V.—Since the rise of activity of de-emanated radium is the complement of the loss of activity of the equilibrium amount of emanation for the same period, the amount of emanation formed from a given amount of radium in any given time may be found from the table by a simple subtraction. A radium salt in a sealed receptacle remains in emanation equilibrium because the same amount of emanation is formed as is lost in a given time. A radium salt showing an activity of 1,000 millicuries will for practical purposes show the same activity in an hour, a day, a week, or a year later, as the period of radium is 1,690 years. The emanation table, however, shows that 1,000 millicuries of emanation will lose in an hour 1,000—993=7 millicuries, in a day 1,000—835=165 millicuries, in a week 1,000—283=717 millicuries; or, to put it in another way, 1,000 milligrammes of radium metal will have to produce 7 millicuries per hour, 165 millicuries per day, and 717 millicuries per week in order to maintain emanation equilibrium and register on the electroscope 1,000 millicuries. Therefore, to find the amount of emanation, a given quantity of radium element or salt will collect in a given time, it is only necessary to subtract the amount of emanation left in that time as shown in the table, from the amount of emanation in equilibrium with the radium or salt, also shown in the table. As about 10 per cent. of the quantity of emanation present is lost during the collection from a radium solution, when the amount of radium does not correspond to a number on the table the next lower number is accurate enough for practical purposes. However, the theoretical quantity can be ascertained —as for example, 92.6 milligrammes of radium in four days, two hours, will collect 92.0+.6—44.2—.288=48.112 millicuries of emanation

VI.—It is obvious that if a supply of emanation is not measured by the electroscope till some time after it reaches its maximum, the activity at its maximum can be easily ascertained from the table. Thus, if a supply of emanation shows an activity of 144 millicuries twenty hours after it is sealed off, it would have reached its maximum sixteen hours before measurement, and the table shows that its activity at that time was 164 millicuries.

VII.—For clinical work the table has great advantages. With it before him the operator is in a position on the spot to estimate, or subsequently to record, the average quantity of emanation employed, and has not to await a suitable opportunity to calculate it out. He can ascertain at once the amount of ionisation effected by a certain length of exposure, or the length of exposure required to affect a certain intensity of ionisation, taking into account, of course, by how much ionisation is reduced by the screen used. Briefly, it is much easier to find the activity of emanation by counting lines, *i.e.* hours, or columns, *i.e.* days, than by multiplying together a series of numbers. I have previously pointed out that the average amount of emanation employed during an exposure is approximately the amount of emanation present at half-time in the exposure. For instance, 81.7 millicuries of emanation are buried in a tumour at nine a.m. on January 1st for sixteen hours, until, as shown in the table, the activity is reduced to 72.4 millicuries. If these two and the intermediate fifteen numbers are added together and divided by seventeen, or the sum of the intermediate numbers divided by fifteen, the result 76.9 millicuries is the average activity of the emanation employed, and is the figure on the table showing the amount of emanation present at the end of the eighth hour after treatment is begun or at half-time in the treatment. Therefore to find the average amount of emanation employed it is only necessary to count down half the number of hours in the exposure. If the exposure is for seventeen hours the quantity factor is the mean of the numbers at the eighth and ninth hours, in this case 76.6 millicuries. As before these two exposures may be conveniently recorded as 76.9×16=1,230.4 millicuries-hours and 76.6×17=1,302.2 mch., where the quantity factor and the time factor of a dose are put down in the order indicated by the term millicurie-hour, and their product in millicurie-hours indicates the total amount of ionisation effected, having due regard for the effect of the screen used. If the same supply of emanation is buried at eleven a.m. on January 2nd, *i.e.*, one day two hours after its activity was 81.7 millicuries, the table shows its activity to be 67.2 millicuries; if this is left in for eight hours the average dose is found four numbers down and is 65.2 millicuries.

One error that is liable to occur in using the table is from miscounting the days and hours, which it is comparatively easy to do if pressed for time. To avoid this possible source of confusion I have modified the table as below, with an example of the particulars of a supply of emanation to illustrate the use of the table.

In the revised table the numbers of days and hours are left blank, so that the dates and times corresponding to the supply of emanation may be filled in opposite their proper lines and columns. The numbers in the 0 hour line, except 1,000, are omitted, as they are the same as those in the twenty-four hour line and are liable to be counted in mistake. The lantern slide also illustrates a form of leaflet, which might with advantage be sent out with each supply of emanation from a radium institute. If the time of maximum activity, and its measurement is recorded on the leaflet, the surgeon has all the particulars he requires for estimating his dose with the least labour to himself. It is convenient to have the table showing the rise of activity of radium emanation till the maximum is reached in four hours, as it is sometimes possible to obtain the supply before it reaches its maximum. By using it for about two hours before maximum, the average activity is as great, or greater, than for two hours after that time.

In conclusion, I wish to express my indebtedness to Mr. Moss, scientific director of the Royal Dublin Society Radium Institute, for furnishing me with the printed copies of my table, which you have before you.

Eight Capillary Tubes of Radium Emanation.
Maximum Activity 65.15 millicuries.
At 4.59 p.m., *January 4th*, 1916.

1	hour	before	time	of	maximum,	98	per	cent.	present.
1½	hours	,,	,,	,,	,,	95	,,	,,	,,
2	,,	,,	,,	,,	,,	89	,,	,,	,,
2½	,,	,,	,,	,,	,,	76	,,	,,	,,
3	,,	,,	,,	,,	,,	54	,,	,,	,,
3½	,,	,,	,,	,,	,,	22	,,	,,	,,
4	,,	,,	,,	,,	,,	0	,,	,,	,,

TABLE Showing Hourly Decrease of Radium Emanation after Reaching Its Maximum.

Date.	(Sat., 15-1-16.)		Tues., 4-1-16.	Wed., 5-1-16.	Thurs., 6-1-16.	Fri., 7-1-16.							Fri., 14-1-16.	Date.
Time.														Time
(2.53 a.m.)	1000													
(3.53 a.m.)	993	829	692	578	482	403	336	281	235	196	164	136	114	(8.53 a.m.)
	985	823	687	573	479	400	334	279	233	194	162	135	113	
	978	817	682	569	475	397	332	277	231	192	161	134	112	
	970	811	677	565	471	394	329	275	230	191	160	133	111	(11.53 a.m.)
	963	805	672	561	468	391	327	273	228	190	159	132	111	
	956	799	667	557	465	389	325	271	226	188	157	131	110	(1.53 p.m.)
	949	793	662	553	462	386	322	269	225	187	156	130	109	
	942	787	657	549	458	383	319	267	223	186	155	129	108	
	935	781	652	545	455	380	317	265	221	184	154	129	108	
(12.53 p.m.)	928	775	647	541	452	378	315	263	219	183	153	128	107	(5.53 p.m.)
	920	769	642	537	449	375	313	261	218	182	151	127	106	
	914	763	637	533	445	372	310	259	216	180	150	126	105	
	907	757	633	529	442	369	308	257	214	179	148	125	104	
	900	752	628	525	439	366	306	255	213	178	147	124	103	
	894	746	623	521	435	363	303	253	211	176	146	124	103	
	887	741	619	517	432	361	301	251	210	175	145	123	102	11.53 p.m.)
	880	735	614	513	428	358	299	250	208	173	144	122	102	(12.53 a.m.)
	874	739	609	509	425	355	297	248	206	172	143	121	101	
	867	724	605	505	422	352	294	246	205	171	142	120	100	
	861	719	600	501	419	350	292	244	205	170	141	119	—	
(11.53 p.m.)	854	713	595	497	416	347	290	242	202	169	140	118	—	
	848	708	591	493	412	344	288	240	200	168	139	117	—	
	842	702	587	490	409	342	285	238	199	166	138	116	—	
	835	697	588	486	406	339	283	236	197	165	137	115	—	7.53 a.m.
Date.	(Sun., 16-1-16.)		Wed., 5-1-16.	Thurs., 6-1-16.	Fri., 7-1-16.	Sat., 8-1-16.							Sat., 15-1-16.	Date.

Note.—The line under 647 denotes that the record of the supply of radium emanation starts at that number, remembering that 64.7 is the actual activity in this case.

The hour 5.53 p.m. in the right-hand time column is the time calculated from the data supplied, at which the activity is 64.7 millicuries.

The line from under 619 to the right divides the days, the date above the line being one day behind that below the line.

When the activity of the supply goes below 10 millicuries, the dates, and the times in the right hand column are cancelled, and the dates—in brackets here for clearness—and the hours in the left-hand column, also in brackets, are substituted. The later particulars should only be filled in when they become necessary.

If the dates and hours are filled in on the table as above, to ascertain the average amount of emanation employed in an exposure it is only necessary to read the figure on the table opposite the hour and date at which half the exposure is over. Thus if the patient is treated about 9 a.m. on January 7th for six hours, the average quantity of emanation used on him will be opposite 11.53 a.m. on that date, and is seen to be 39.4 millicuries.

THE TREATMENT OF WOUNDS OF THE KNEE-JOINT.

By SURGEON-MAJOR VICTOR PAUCHET.

(Of the French Military Health Service).

[Specially Reported for this Journal.]

Wounds of the knee joint constitute some of the most serious and most difficult to treat of injuries received in warfare. The number of amputations and deaths resulting therefrom is formidable. Prompt, energetic surgical treatment alone will save life and limb.

Now this is what usually takes place. A soldier with a wound of the knee is admitted to a hospital somewhere in the rear. To begin with, the joint is put up in a gutter splint for a day or two and the patient is kept under observation or is transferred elsewhere. His temperature begins to rise. The surgeon performs a timid arthrotomy, that is to say, he makes an incision on each side of the patella, in spite of which the septic condition tends to get worse. The operator then makes a subtricipital counter-opening or one or more openings posteriorly, but still the infection progresses. The surgeon then resects the knee, whereupon the patient's state becomes frankly unsatisfactory, his temperature runs high and cachexia sets in. As a last resort the surgeon amputates through the thigh and the patient succumbs. This, then, is the history of a wound of the knee joint in quite a large proportion of the cases.

Now why, let me ask, are wounds of the knee joint so serious? No doubt because they are usually associated with bone lesions, splintering of the femoral or tibial epiphyses, separation of the condyles, etc. When the injury is caused by a rifle or shrapnel ball only the soft parts may be damaged, and it is within the limits of possibility for the wound to heal without any troublesome complication. As a rule, however, the injury is inflicted by fragments of shell which carry in with them bits of cloth, thus practically ensuring the development of sepsis. The seriousness of the case is aggravated by a lack of decision on the part of

the surgeon, so that each intervention comes too late.

Arthrotomy is performed after sepsis has set in, resection is done when it becomes plain that arthrotomy is insufficient, and, lastly, amputation is resorted to as a last resource after much hesitation. Now each of these decisions ought to have been taken at an earlier and more opportune date, and were this the case many lives and limbs would be saved.

Our rules of conduct comprise:

(1) *Immobilisation and Evacuation.*—Hospitals at the front ought to be specially reserved for laparotomies, arrest of hæmorrhage and *real* immobilisation of osseous and articular lesions. The wounded should then be dispatched by motor car at least 20 or 30 miles to the rear, to hospitals where they would remain until convalescent, especially if they have sustained wounds of a limb. The mere fact of passing from the hands of one surgeon to another aggravates the prognosis *per se.*

To immobilise the knee we must have recourse to a coxalgia plaster splint extending from the hip right down to the toes (Salot). This fixation is often the means of preventing septic infection taking place or getting worse.

The so-called gutter splints and other metallic appliances are mere snares and never immobilise anything. To really prevent movement of fractured limbs we must either correctly apply a Delbet apparatus or make an enormous plaster splint in accordance with the models given by Calot (*vide* the *Journal des Praticiens*).

(2) *Radiography of the Knee.*—It is indispensable that we should know for certain whether there are lesions of bone or foreign bodies within the joint. An excellent radiographic service has been in working order almost from the onset of war, so that surgeons have had nothing to complain of from this point of view.

(3) *Armed Expectation.*—If we are dealing merely with a lesion of the soft parts, if the wound appears to be slight, we may adopt an expectant attitude with simple immobilisation, but only on condition that we keep a sharp look-out on the temperature chart, prepared to intervene at once should there be the slightest menace of local infection.

(4) *Arthrotomy.*—In the absence of lesions of bone, should there be effusion into the joint and when there is mild sepsis, we may limit our intervention to arthrotomy with triangular drainage tubes; to lateral and vertical incisions on each side of the patella, and a third, sub-tricipital. The transverse drain unites the two lateral incisions, and the oblique drains place the two lateral incisions in communication with the supra-patellar incision.

Should there be lesions of bone, arthrotomy thus performed may prove insufficient, so that it is not worth while wasting time trying it. We must at once perform transverse arthrotomy, by means of a horse-shoe incision as for resection. Divide the patellar ligament and the two lateral ligaments, and the gaping wound enables us to remove splinters of bone, etc. Moist dressings with Dakin's solution, and if necessary, continuous irrigation.

(5) *Resection.*—This will only be decided upon after making the transverse incision, either because the lesions appear to render repair quasi-impossible or because infection of bone seems unavoidable, or because there is already septic mischief present with grave suppuration, whereupon we must resect forthwith without hesitation. A third of an inch of the tibia is removed, an inch and a half or so of the condyles, and the parts are fixed in apposition with bronze wire. Two, three or four drains are introduced on either side. One stitch is placed in the skin. We must not wait for infection to take place before performing resection. It is perfectly useless to resect when the wound is already infected. We must, if possible, resect before the wound has become septic, otherwise it means amputation or death.

(6) *Amputation.*—If the lesions are serious, if the lower third or quarter of the femur is involved, if infection takes place in spite of resection or arthrotomy, we must amputate, and this without any delay, otherwise amputation spells death.

If we try to be too conservative of a limb we fail to save either life or limb.

In short, the most conservative surgeon is he who, from the onset, arrives at a decision in regard to the lesion and acts upon it forthwith.

The subsequent measures are of capital importance, and this is one reason why the patient should not change hands.

THE THAMES VALLEY: CERTAIN OF ITS NATURAL AND MEDICAL ATTRIBUTES.*

By S. D. CLIPPINGDALE, M.D.

Vice-President of the Balneological and Climatic Section, Royal Society of Medicine.

THE author, after briefly acknowledging the valuable help received from Medical Officers of Health in the confirmation of his paper, among whom he mentioned Dr. Alfred Greenwood. Dr. Harry Jones, Dr. Frank Laurance, Dr. J. M. Martin, Dr. James J. Pateison, Dr. C. Grant Pugh, Dr. Wm. Sisam, Dr. John C. Thresh, Dr. John T. Thomas and Dr. Herbert Williams; he proceeded to remark that the River Thames is, and some of its tributaries are possessed of certain attributes which seem to have a definite bearing upon the health of the riparian dwellers. The subject, I think, has not been dealt with before in a concrete form and seems a fitting one to bring before this Section of the Royal Society of Medicine. I regret, however, that from want of a deeper knowledge of the subject I can only do so in a very imperfect manner.

Definition.—But first it is necessary to define the River Thames, for, strange as it may seem, the identity of our metropolitan stream is by no means beyond dispute. Until recently, that part of the river which proceeds westwards from its junction with the Thames at Dorchester, was known as the Isis. It was so called by John Leland, in the time of Henry VIII., by Edmund Spenser in the time of Queen Elizabeth and by Isaac Walton, in the time of the Commonwealth. The Isis, after its junction with the Thames, was called by the Romans "Thamesis," and upon an old map, of which I have a copy, it is spelt as a hyphened word. The Isis is so named upon all maps published down to thirty years ago and later, and is still so called by the people of Oxford and Oxfordshire.

Of late, however, an edict has come forth from those who are supposed to know, and founded upon some words in a Saxon charter, that the name Thames applies to the entire length of the river and that the river Thame is a tributary. We have thus the curious condition that a river of one name has a tributary of a very similar name.(*a*)

To account for the name Isis, it is suggested that this was created by the Dons of Oxford,

* Abstract of paper read in the Balneological Section of the Royal Society of Medicine.

(*a*) If it is suggested that the river Thames takes its name from the town of the same name, and that there is no corresponding origin for the name Isis, I would venture to suggest that the village of Eisey or Isey, on its banks near Lechlade, may possibly supply such an origin.

though why the Dons of Oxford should have named their river after a heathen goddess, who is not known to have had any territorial connection with the place, is not explained.

Source.—Accepting, as in duty bound, what is now regarded as authority in this matter, we have next to determine the head of the river, for like the Hydra, the river serpent with fifty heads, the Thames has many, or rather a great many springs claim that honour. Those who attended, in 1901, the meeting of the British Medical Association at Cheltenham, will remember being taken to a place in the parish of Charlton Kings called the "Seven Springs," over which is the inscription:

"*Hic Tuus O Tamesine Pater Septemgeminus Fons.*"

As this source, the seven springs, makes the river thirty miles longer than any other source, I propose to adopt it as its head, although I am not strictly orthodox in doing so.

Length and Fall.—From the seven springs to the North Sea, the Thames runs a course of about 250 miles. The head of the river is 600 feet above its mouth, so that its fall is about 1 in 2,000, *i.e.*, 21 inches to a mile.

The *Width* of the river, of course, increases as it approaches its mouth. At Oxford its width is about 100 yards, at London Bridge 260 yards, at Gravesend 800 yards, and at the Nore 5 miles.

The *Area* of the Thames basin is 6,160 square miles, equal to about one-seventh of the whole of England.

The *Amount of Water* in the river may be imagined, when it is remembered that 100,000,000 gallons pass Lechlade and 380,000,000 gallons pass Teddington in one day.

As to the *Age* of the river, Professor Huxley (12) estimates that the chalk basin alone has taken 7,200 years to form and that the entire history of the river is a matter of hundreds of thousands of years. "There is clear evidence," he says, "that the Thames Valley was the haunt of Savages armed with flint weapons and that Elephants, Rhinoceroses, Bears and Hyenas roamed through its forests.

Geology.—The structure of the Thames basin is interesting geologically, and important medically. Details of its geology will be found in the works of Huxley (12), Jordan (13), Phillips (16), Prestwich (17), Whitaker (19), and Woodward (20). It must suffice here to give a skeleton of the subject and to indicate its points of medical interest.

Every river must, of course, be helped up by a "basin" of some sort, otherwise its water would percolate and disappear. The Thames is held up by two basins which fit one into the other like two table basins of different sizes. The upper of these basins is of clay, the lower of chalk. Between the two is a deposit of what are called "Lower London Tertiaries." Upon the clay basin is a layer of gravel, and above this a layer of alluvial soil. The lower basin, of chalk, rests upon solid rock.

With regard to these different deposits, the uppermost or *Alluvium* is simply material which has been washed down from the watershed, and naturally varies in different places. In the west it is of a chalky nature: in the east it is a rich loam. The thickness of the alluvial soil is from a few inches to about ten feet.

The *Gravel* which underlies the alluvium is what is known as "Valley Gravel," but is structurally the same as other gravels. Medicinally, it is of interest, as containing an oxide of iron and a little arsenic. The depth of this gravel varies from about five to about fifty feet. It is into this gravel that the wells were sunk which were so graphically described by our late President, Dr. Septimus Sunderland, in his inaugural address, an address which happily for those who did not hear it, has now been reprinted in book form (18). In some places, the gravel is replaced by *Brick Earth*, a soil, says Huxley, very suitable for the growth of vegetables and, as doctors know, very productive of rheumatism.

Beneath the gravel lies the *Clay*. This contains fossils, and is really a marine mud. The depth of the clay in the London district is about 400 feet. It gets thinner towards the mouth of the river, and is absent between Windsor and Maidenhead Otherwise it underlies the Thames everywhere, but bears different names. In London we call it "London Clay," in Oxfordshire it is known as "Oxford Clay," while up the little river Thame, it is called "Kimmeridge Clay." To a scientific geologist there is apparently a difference between these different kinds of clay, but to an amateur very little, and from a sanitary point of view, none.

The ridges of the Thames clay basin form what are called the Northern and Southern heights of London, and are sometimes four hundred feet above sea level, so that the highest and consequently the healthiest parts of London are upon clay. The soil lying next or near the water course is always either gravel or alluvium. These matters I indicated in a paper I had the honour of reading before the old Balneological Society (5). The paper excited a good deal of criticism, as it represented facts in opposition to received views. I referred, however, to the Registrar-General's statistics and to the geological map of London, and there I left the matter. The fallacy, for such I regard it, as to the superiority of a gravel soil is no new thing. I recently came across the following couplet in Garth's "Dispensary" (Canto III.) published in 1699:

"The sick in hundreds sooner shall repair
And change the gravel pits for Essex Air."

This couplet is written in satire, and infers that it is better to live in the Gravel Pits region of Notting Hill than in the bracing air of Essex, whereas the experience of one tuberculous patient will teach us the contrary.

The clay is capped in some places by Bagshot Sand left by a primeval flood. There is a small patch of this sand at Hampstead. Formerly this sand was carried down to London and spread upon the floors, but it was found that it was washed into the river, which it tended to silt up, to the extent, it is said, of ten feet in fifty years, and the practice was stopped by Act of Parliament in 1760 ("Notes and Queries," Jan. 15th, 1916.)

Below the clay, as already stated, is a layer of *Lower London Tertiaries*. This is a layer 80 feet thick. Its composition varies. It usually consists of Reading and Woolwich beds, but towards the estuary of the Thames there is also an addition of Thanet sand. It is into the Lower London Tertiaries that an Artesian Well must be sunk to collect the water that has gravitated down from the Chiltern Hills on the north and the North Downs on the south, and lies upon the chalk. An artesian well, therefore, to pass through the clay, must be at least 400 feet deep, and is said to cost £1 a foot to make.

The *Chalk*, the lowest of the Thames basins, is about 800 feet thick in the London area, but less thick elsewhere. It rises to the Chiltern and Cotswold hills in the north and to the Wiltshire and North Downs in the south. Its structure varies. In the Chiltern Hills it is laminated, but in the Cotswolds it resembles masses of fish roe, and so is called "oolite."

The *Width of the Thames Valley* varies considerably from the narrow gorge of Streatley and Goring, which is less than half a mile, to the wide expanse of forty miles between Dorking and Dunstable. The river was formerly much wider than it is now, and extended to the chalky crests of its watersheds. At a period still more remote, the Thames was a tributary of the Rhine.

As the centre of the earth's gravity has shifted, so the Thames has been drawn nearer the North Pole at one time and repelled from it at another. Hence in some of its deposits are found the remains of Arctic animals, and in others the vestiges of tropical plants. The presence of Peat in some places is evidence of submerged forests, Pepys the diarist, states that among the things which did surprise him was that workmen in digging a dock at Blackwall, came upon a tree standing upright with nuts upon it ("Diary," Sept, 22, 1665),

Oscillation of the Thames Valley is still going on. In 1660 the magnet in London pointed due N. and S. Then there was a gradual declination to the west, which reached an extent of 25 degrees in 1818. Since 1818 the needle has been gradually returning to its usual position.

The amount of *Rainfall* varies. As might be expected, it is greatest in the western part, owing to the close proximity of the Hills, and lowest in the eastern part, where the surface is flat. (The amount of rainfall at various places in the Thames Valley was shown in diagrams).

Tides.—Below Teddington, that is for a distance of 77 miles, the water is tidal. The water flows and ebbs twice in the twenty-four hours, about five hours being spent in the flow and about seven in the ebb. Vagaries in the tides, however, are on record. In 1638, for instance, it flowed twice in three hours, three times in four hours on March 22nd, 1682, and again twice in three hours on November 24th, 1777. The tides vary twice monthly, and are known as "Spring" and "Neap" tides: the former, in which the water is highest, occurs at the new or full moon, the latter, in which the water is lowest, occurs during the moon's second and fourth quarters. The Spring tides being due to the attractive forces of the sun and moon acting in a straight line, the Neap tides when these forces act at right angles.

Floods, Frosts and Fogs.—The Thames, like other rivers, has often been guilty of eccentricity in these matters. It has often overflowed its banks, especially during a spring tide with heavy rainfall. The earliest recorded flood was in 1235, when lawyers and litigants had to be taken from Westminster Hall in boats. Other historical floods have occurred in 1736, 1748, 1762 and 1791. Since the formation of embankments, however, the river, although it occasionally rises to a great height, does not overflow its banks so far as London is concerned. In the western part of the river, however, disastrous flooding occurs. In the eastern part of the river the water is kept from the Essex marshes by a sea wall, said, by Sir Walter Besant (2) to have been put up by the Romans. Frosts were formerly more common than in recent times. In 1063 the Thames was frozen over for fourteen weeks. In 1434 it was frozen from London to Gravesend. In 1684 the ice on the river was eleven inches thick, a fair was held on the river and forty coaches plied daily up and down its course. In the winter of 1716 an ox was roasted on the river. The last severe frost of this kind occurred in 1814. Fogs, although they spring from the surface of the river, are often denser on the hills around; the reason is that on ascending the hills they are kept down by a layer of dense cold air. Fogs, however, are now comparatively rare.

Flora and Fauna.—There is not much to record with regard to the Flora except that at certain parts the temperature of the Thames Valley is so mild that sub-tropical plants can be grown. The river banks produce the usual poisonous plants, Foxglove and others, so carelessly eaten by children and so carefully avoided by cattle. Upon the banks of the Thame, Woad (Isatis tinctoria), says Mr. Cornish in his interesting book, (8) flourishes to an extent sufficient to stain a whole British tribe. Water-cress flourishes in the streams which come down from the chalk.

Of the birds, the most interesting scenically are the beautful swans, black and white, which add so much to the beauty of the river. They are all alien birds, and are carefully protected by the Crown.

Seagulls, as is well known, find their way up the river in times of stress of weather. They fly over the bridges, never through them, and locate themselves upon the fresh-water reservoirs at Barnes.

Edible fish, especially trout, is found in great quantity in the upper part of the river and its tributaries. The shrimp is interesting as indicating by the colour of the shell the condition of the water. At the mouth of the river this is pink, at Gravesend it is brown and sometimes black. Before the pollution of the water, salmon flourished in great abundance near London, and the fishermen were wont to offer it as a tithe upon the high altar at Westminster. Since the repurification of the river many fish have reappeared, and whitebait has had the temerity to appear off Greenwich.(*a*). Recently a porpoise made its appearance in the river, but, says Mr. Cornish, like a true London porpoise it halted opposite a public house and was arrested.

Scenery.—For an account of the Thames scenery I must refer to the many popular works written upon the subject (see References). I can only point out here, that, for grandeur of scenery the Thames cannot compare with the Rhine or even with the Caledonian Canal. There are no castle-capped crags and no waterfalls. But for the soft sylvan beauty which is peculiarly English and for old towns and old churches, the Thames has a charm which is peculiarly its own.

HEALTH.

It is, I think, generally admitted that those who live in valleys are at some disadvantage with regard to health. The reason of this may be difficult to trace. We are all of us conscious that throughout life we are under the influence of two forces, the "Vis Vitæ," which urges us to energy, and the "Vis Inertiæ," which leads to inaction. We feel the former force more before, and the latter force more after, middle age. The former

(*a*) Greenwich, formerly noted for its ministerial Whitebait Dinners.

asserts itself when we are upon a bracing hill, the latter when we are in a relaxing valley.

Metabolism of our tissues is greater upon a hill than in a valley, consequently our power of resistance is increased and our opsonic index raised. In this way it may be that dwellers in valleys appear to be more prone to illness than those who live upon hills. The Thames Valley, in common with other river valleys, appears to exemplify this, and in the following brief accounts I will mention certain maladies which appear to be so influenced:—

Adenoid Growths and enlarged tonsils in certain parts of the Valley are above the average rate.

Ague.—In the last paper I had the honour of reading before this Section (4) I stated there was formerly prevalent a malady known as "London Ague," and that Oliver Cromwell, Charles II. William III. and Queen Anne had suffered from it. The disease, however, with the introduction of arterial drainage and the closing in of many small streams which formerly permeated London, had disappeared. More recently ague was common on the Essex marshes, and when, in 1877, I was House Physician at the London Hospital, we admitted several cases of it. Dr. Thresh, the Medical Officer for Essex, however, informs me that through the better drainage of these marshes, the disease has almost disappeared.

Anæmia, independent of organic disease, as might be expected, is common in some of the more closed in parts of the Thames Valley.

Cancer.—The incidence of Cancer is a difficult subject. We are all acquainted with the views and statistics of Alderson (1), Clemow (3), Haviland (10) and Hirsch (11). Two medical officers in the western part of the Valley and two in the eastern part, report not only super-normal frequency of the disease, but also a tendency to its increase. Some of my correspondents attribute the high mortality from cancer to the great longevity prevalent in their respective districts; but I must confess I was not aware that cancer was a malady especially frequent in old age. In a paper upon the Chiltern Hills, which I read before this Section some years ago (6) I stated I had found cancer very frequent in the Chiltern Valleys, and that it seemed to be of a tribal or family character. I would venture to suggest that this may be the case in certain parts of the Thames Valley. The question of the so-called "Cancer Houses," often undisinfected, may also be considered.

Enteric Fever.—Dr. Thresh, in his medical report for Essex, states that Typhus Fever used to be most prevalent in South Essex, bordering the Thames, but it was proved to be due to people eating shell fish collected on the foreshore. When this was known, the Typhus rate dropped until it is little, if any, higher than elsewhere in that county. On the other hand, Dr. Pugh, Medical Officer for the independent borough of Southend-on-Sea, complains that he still has this difficulty to contend with, and that people eat largely of the cockles, mussels and other molusca which are ound at Leigh and around Canvey Island.

Fibrositis, so well described by our distinguished colleague, Dr. Jones Llewellyn, is prevalent in both the upper and the lower parts of the Thames Valley; in the upper part on account of the frequent inundations, and in the lower part on account of exposure to the keen winds of the North Sea.

Goitre, as might be expected, is prevalent in the Valleys of both the Chiltern and the Cotswold Hills.

Tuberculosis.—Perhaps one of the most instructive papers upon the Etiology of Phthisis, was that contributed to the *British Medical Journal* a few years ago by our President upon the influence of rain-bearing winds in developing Phthisis. Dr. Gordon's paper (9), I think, only referred to Devonshire, but his observations apply equally to the upper part of the Thames Valley, which is traversed by the same rain-bearing winds. Another important communication by our President and dealing with the same subject, was his Inaugural Address in which he showed the influence of damp soil as a factor in the production of this disease.

All my correspondents in the upper part of the Valley report a prevalence of Phthisis apart from the question of infection, showing that the prevalence is due to local and not to personal causes.

Towards the Thames Estuary, however, the disease becomes rarer, due no doubt to the purer air breathed by the inhabitants: air that has been purified by its contact with the ice around the North Pole and charged with the salt it has picked up in passing over thousands of acres of ocean. In this connection it is interesting to note that the Essex marshes, "Saltings," as they are called, produce excellent beef and mutton, and it is said the superior mutton called "pre salé" derives its name in this way (Cornish).

Violent Deaths are above the average in all parts of the Thames Valley, the reason being no doubt, as pointed out by Dr. Middleton Martin (14) the presence of the river as conducive to death by drowning, accidental, homicidal or suicidal.

Therapeusis.

In a district which differs so widely in its climate as does the Thames Valley in its long range of 250 miles, it is obvious that cases which are suitable for one part of it are unsuitable for another. For the anæmic or tuberculous, residence near the mouth of the river is preferable, or failing residence, frequent trips down to the estuary. But for the over-worked student or brain-fagged man of business, a stay at one of the quiet villages up-stream, or frequent trips upon the up-river streams, will be found to provide a very effective scenic and atmospheric bromide.

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CLINICAL RECORDS.

A CASE OF HÆMORRHAGE IN THE RETINA AT THE YELLOW SPOT.

By JOHN ALLAN, M.D., D.P.H.

IT is surprising how apparently trivial injuries of the eye may result in lesions which, temporarily at any rate, may cause marked loss of vision. The following case is of interest in this respect:—

H. C., a married woman about 30 years of age, came to me complaining of loss of vision in the right eye of two days' duration. The eye appeared quite normal, but she could only distinguish fingers at a distance of 2 feet, and even at that distance objects were to her obscured and cloudy. Vision in the left eye with Snellen's types was 6/6. She at first denied any injury, but on thinking the matter over she remembered that two days before, when shaking a small door-mat, one of the corners of the mat had struck her right eye, but she experienced no actual pain, and the injury was so trivial that it had escaped her memory. There was no history of other injury. After dilating the right pupil with homatropine, the fundus was examined with the ophthalmoscope, and hæmorrhage in the macular region was discovered. The fundus was otherwise normal, and there was no error of refraction. The patient maintained that she had always been healthy, and an examination of her various systems on more than one occasion confirmed her statement. Treatment was merely expectant. Domestic duties prevented the patient resting in bed as advised, although she promised to limit her exertions as much as possible. A weak atropine solution was ordered for instillation into the eye twice daily. When seen three days later the condition was much the same; there had been no further hæmorrhage, but it was difficult to say whether or not there had been any absorption of the blood already effused. However, when the patient was next seen, there was no doubt about the hæmorrhage being less marked, and she was able to see objects across the room, although their outlines were still indistinct. Her progress towards the successful termination was slow but steady. Two weeks after her original visit vision in the right eye was 6/36, and a week later 6/18—in both instances the pupil being partly dilated with atropine. This was now stopped, and a week later vision in the right eye was 6/6. A drop of homatropine was instilled into the eye on this occasion to facilitate ophthalmoscopic examination, which failed to reveal any abnormality of the fundus. An inquiry two months afterwards elicited the information that there had been no further trouble with vision.

Hæmorrhage in the retina at the yellow spot is not very frequent, but it undoubtedly occurs, and in most cases it is pathological in the sense of being due to disease. In the case I have just recorded I think disease may be excluded, and the only possibility is that the condition resulted from the very slight injury already alluded to. I recollect seeing a somewhat similar case when I was resident in a seaport town. A healthy young sailor in the course of his duties received a blow on one of his eyes with a piece of rope. There was slight contusion of the lower eyelid, but no other evidence of injury except hæmorrhage in the macula. The man refused to lie up, and treatment was similar to that above described, and the result was that normal vision was in time re-established. These two cases would seem to suggest that in cases due to injury in healthy subjects a very hopeful prognosis may be given. In cases of macular hæmorrhage, the result of disease, it might perhaps be advisable to be more guarded, but I think it is generally found that even these cases clear up well with a return to vision as good as that present prior to the occurrence of hæmorrhage. In some cases, however, vision may remain defective even though the ophthalmoscope may fail to demonstrate any abnormality in the macular region. It is not inconceivable that some of those people who in later years fail to respond to glasses (after the error of refraction has been properly estimated and carefully measured) may have at one time suffered from unsuspected or unrecognised hæmorrhage in the macular region—hæmorrhage, moreover, which has left no demonstrable fundal changes. This seems to me a possible and quite feasible explanation of these puzzling cases to which I have just referred, and which are occasionally met with. It would be most interesting to be able to follow up these cases of macular hæmorrhage, and to keep them under observation for the rest of their lives, but for various reasons this would not be an easy matter.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

CONSCIENCE.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I have turned the pages of your last few numbers hoping that someone qualified for the task would have commented on Dr. Claye Shaw's statements under date March 22nd and April 5th. It seems from his article and subsequent letter that modern psychology asserts that conscience must no longer be defined as an innate faculty which distinguishes right from wrong; indeed, such is "a false assumption." This is a large order.

A correspondent taking objection to this view is informed that he is confusing conscience with consciousness.

The "Standard Dictionary," Vol. I., page 399 thus defines Conscience:—

"(1) The power or faculty in man by which he distinguishes between right and wrong in conduct and character, and which imperatively commands and obligates him to do the right and abstain from doing the wrong; the moral nature; moral faculty; moral sense.

"(2) Conviction of right or duty . . . . scrupulosity; as, a man of *conscience*.

"(3) (Archaic) Consciousness."

Under (1) is given as an illustrative passage the sentence from Young's "Christ of History": ". . . . *conscience* is needed for the age, as for the individual—a power that shall reveal it to itself, and arouse and convict it."

And surely this is what the average man would mean by the term conscience. When he swears "on his soul and conscience," or says he can or cannot do or abtain from doing a certain thing "conscientiously," he is speaking in terms of the "Standard Dictionary."

Dr. Shaw's extraordinary contention that the shedding of blood is justified by the most atrocious murder in the world's history I pass, but as he

appeals to Scripture, it is in order to remark that conscience, in the above-quoted sense, is expressed or implied therein from cover to cover—from the hiding of Adam after his sin to the life-aim of Paul, "to have always a conscience void of offence toward God, and toward men." And if the "Light which lighteth every man that cometh into the world" does not operate through what we term conscience, then I know not what those words may mean. Blurred and dimmed grievously this light may be, indeed, but some glimmerings of it are always to be found, save in those whose fearful lot it is to "have their conscience seared with a hot iron."

In none, perhaps, was the Light more dimmed than in those New Hebridean cannibals among whom Dr. Paton laboured. I find in his "Life" that he mentions certain revolting instances of their habits, and adds, "All such cruel and horrible practices, however, they tried to conceal from us." This experience I believe has been that of various other missionaries. But why this sense of shame in such degraded beings as these cannibals? If it came not from conscience, how is it to be accounted for? Not, I imagine, by "the state of consciousness, . . . the result of the physical processes which the various environmental excitants bring about in the brain," this last being, as I understand from Dr. Shaw, modern psychology's evaluation of "conscience."

It was the business of Lord Roberts—and few fulfilled it better than he—to be a reader of men as well as a leader of men. At the risk of multiplying quotations, I will venture to recall his words in this connection :—

"If you penetrate deep into the depths of human nature, you will unfailingly reach in each one of us a stratum which is impervious to discipline, or any other influence, from without. The strangest manifestation of this truth lies in what men call conscience—an innate sense of right and wrong which neither reason nor man-made law can affect."

I have no more sympathy with conscientious objectors than has Dr. Shaw, but his way of grouping them all together as a body of degenerates afflicted with "a selfish consciousness" is unworthy and unjust. There is a residuum of these men for whom, although profoundly disagreeing with their sense of right and wrong, I have a deep respect, as anyone must have who has the least knowledge of the way in which suffering for conscience sake is interwomen with every fibre of the history of the Society of Friends, and not of them only. Such men deserve to be distinguished, and any decent person will distinguish them, from the ruck of cranks and cowards who have been wasting the time of Tribunals. I desire to believe that it is merely an oversight of Dr. Shaw's that he has not so distinguished in his article in your issue of March 22nd.

I am, Sir, yours truly,
L. Gwillim Davies, M.D.

Histon, Cambridge.
April 14th, 1916.

PATENT MEDICINES AND THE BUDGET.

To the Editor of The Medical Press and Circular.

Sir,—In considering the question of the taxation of patent medicines, it is necessary to bear in mind fundamental facts which it seems are liable to be overlooked even in some responsible quarters. The first of these facts is that the traffic in patent medicines is to a large extent fraudulent. At least 75 per cent. of these preparations are not only fraudulent but are put forth with deliberate fraudulent intent. These facts have been fully demonstrated during the past thirty years. Not to speak of the vast mass of evidence accumulated from many sources, including law reports, the case was proved by the investigations carried out by the British Medical Association, and embodied in the books "Secret Remedies" and "More Secret Remedies," published by the Association. The whole story was unfolded with even meticulous completeness in the Report of the Australian Commission. Lastly, the entire question was exhaustively examined into by the Select Committee on Patent Medicines, whose Report was published in August, 1914. The Report, which was unanimous, ended by naming a long list of classes of patent medicines which the Committee adjudged the most pernicious, and urged that not only the sale but the advertising of these ought to be at once forbidden by law. These condemned concoctions were enough to render the patent medicine trade as a whole an improper source of revenue. It is impossible to believe that Mr. McKenna, when increasing the impost last year, was aware of these facts. Had he been properly acquainted with the question he would have recognised that his action must go far to stultify the tribunal set up by the Government, and to nullify its findings and recommendations. It seems amazing that not one among the permanent officials of the Treasury, the Home Office, or the Department of the Public Prosecutor who were called as witnesses before the Select Committee took the trouble to give Mr. McKenna a hint; he must surely have made some inquiries among the officers of his own Department when contemplating the increase of duty. The second fundamental fact which needs keeping to the front is that the traffic in patent medicines is not only in great part fraudulent, but leads to the infliction of a vast amount of misery and premature death. This remark applies as strongly to those concoctions which contain merely inert or harmless drugs as to those which are made up of ingredients capable of producing serious physiological effects. It is worth while, perhaps, once more exemplifying this fact. Whilst waiting my turn as witness, I heard the testimony of Sir Malcolm Morris and Dr. Whitfield before the Select Committee. They stated that it was quite common to meet with cases of lupus which had passed into an incurable phase whilst the patients had been treating themselves with one or other of the widely advertised "skin cures" of the day. Lupus is curable when recognised and treated in its earliest stages. My own attention was first attracted many years ago to the quack medicine question by a case of cancer of the breast which had passed beyond the reach of surgery whilst the wretched woman had been treating it with the most advertised quack ointment of the day. This was merely coloured grease. Ointments of this kind are now mostly made of a mixture of hard and soft paraffin, coloured and disguised. I am not acquainted with any patent medicine which is advertised merely as a purgative. But there are advertised a great number of medicines (each as a cure for many diseases) which contain merely a small purgative dose. Some time ago I reported in your columns a series of cases of gastric ulcer which I had inquired into at our local hospital. Among six or eight women admitted within about a year with that disease I found that all of them had been dosing themselves with "indigestion cures" which contain merely a small quantity of a cheap purgative. They had all been driven into the wards by the progress of their malady. One died of perforation, and there existed no doubt that her life might have been saved by scientific treatment at an early stage. Cases of this kind due to reliance upon quack medicines are within the common ex-

perience of every practitioner; they are to be found always in every special and general department of all our great hospitals. Shortly before his death, I received from my friend Sir Henry Butlin the report of a long string of cases in his experience in which disastrous results had been brought about in cancer, in tuberculosis, and in syphilis of the larynx through delay whilst the patients were taking patent medicines advertised to cure not only coughs, but all diseases of the throat and lungs. The great majority of these medicines are in themselves quite harmless, being made up of ingredients no more potent than syrup and a little ipecacuanha. Sir Henry Butlin, among half a dozen more of my friends of a similar standing and experience, was prepared to give evidence before the Select Committee if called upon. It is deplorable that writers on this subject, claiming to speak with some authority, do not take the trouble to look through the Report of the Select Committee, with the Minutes in which the evidence of witnesses is given verbatim. They would there find the record of the baneful effects of the quack medicine trade, both as regards concoctions in themselves harmless, such as I have just referred to, and those containing really potent drugs, such as alcohol, morphia and cocaine, all of which act as virulent poisons in the maladies for which they are recommended in mendacious advertisements.

Although I usually take that admirable paper, I did not see the recent article in the *Westminster Gazette*, on this subject. Some weeks ago, in writing in your pages on the attitude of the newspaper Press, I mentioned the *Westminster* as one of the small percentage of papers of similar standing which were taking pains to keep their pages clear of fraudulent advertisements. The conduct of the great bulk of leading newspapers in this regard since the issue of the Report of the Select Committee has been more than scandalous; but, as this letter is perhaps already too long, I propose, with your permission, to deal with this topic in a future communication.

I am, Sir, yours truly,
HENRY SEWILL.

The Old Rosery, Earlswood Common,
April 13th.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Your annotation regarding the absence of taxation of patent medicines in the Budget is timely, and the views therein expressed will, I think, voice those of the medical profession as a whole concerning these nostrums. I do not often read Sunday newspapers, as I find quite as much literature of the week left over to be finished that day. Last Sunday, however, I came across a well-known weekly of that date, and in turning over its pages for the latest war news, my eyes were attracted by the huge black type of such announcements as: "Free Advice to all sufferers"; "A Discovery that has Never Failed"; "Anæmia and Nerves soon Made Well"; "Lightning Cough Cure"; "Backache Kidney Pills," 2s. 9d. a box; "Nervous Breakdown Remedies on Government Stamp," etc., etc. With Budget on the brain, I naturally asked myself why the Chancellor of the Exchequer had not seized so legitimate a source of revenue as these quackeries offered by doubling or trebling the patent stamp tax if he could not afford to tax them out of existence altogether. These nostrums are nearly all owned by foreigners who have made and are making huge fortunes out of an ignorant, confiding public; and as the majority now sold at one shilling and two shillings per box, plus the patent stamp, have been conclusively shown by the Select Committee on Patent Medicines to cost their producers but a fraction of a penny, there should be no hesitation in taxing this ill-gotten wealth to the fullest capacity attainable. Is it yet too late to replace the railway tax now dropped by a heavier impost on patent pills?

I am, Sir, yours truly,
J. WILSON.

April 15th, 1916.

OZONE "TIRED FEELING."

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Our attention has been drawn to a paragraph headed as above, which appeared in your issue of the 5th inst. in reporting some remarks by Dr. W. Harwood Nutt and by Major Wilson, of the Canadian Medical Service, at a meeting of the Roentgen Society. These gentlemen had quite correctly formed the opinion that ozone was produced in the neighbourhood of the X-ray tube, but their further opinion that headaches, sleepiness and tired feeling experienced by the X-ray workers is due to the presence of ozone is based on wrong conclusions. The condition described is caused by oxides of nitrogen, which are generated with the ozone when the ozone is produced by inefficient or unsuitable methods, as in the case in question. A well-designed ozone generator produces pure ozone, and the effect of this gas, if present in suitable concentration for inhalation, is exactly the opposite to that described, in that it has a stimulating, vitalising property, which conduces to greater activity and better health. This has been proved conclusively by thousands of apparatus and installations supplied by this company. It is true that excessive inhalation of ozone in very strong concentration might produce headache in certain cases, but it would be accompanied by effects the reverse of sleepiness or tired feeling.

We may add that whilst the members of the medical profession in this country do not generally appear to have informed themselves regarding the therapeutic properties of ozone and the excellent uses to which it may be put for the treatment of certain complaints, such as diseases of the respiratory tracts, sterilisation of wounds, etc., nevertheless, there are many individual physicians who have done so and have expressed their appreciation to this company. We are always prepared to give medical men every facility in regard to the study of the subject, and to acquaint them with the opinions of those practitioners who have had experience with ozone treatments.

We are, Sir, yours truly,
OZONAIR, LTD.

96 Victoria Street,
London, S.W.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF ANATOMY AND PHYSIOLOGY.

MEETING HELD FRIDAY, MARCH 10TH, 1916.

PROFESSOR T. H. MILROY in the Chair.

DR. J. R. D. HOLTBY showed specimens illustrating symmetrical division of the medial cuneiform bone of the foot. He quoted from Gruber's and Pfitzner's works figures to show that the condition was extremely rare, only occurring in about

0.33 per cent. of cases, and then not necessarily being symmetrical. After referring to the significance of the plantar element as representing a lost tibial ray of the foot, he suggested that the existence of the condition pointed to the possibility of there being, as in some other tarsal bones, always two early centres which, however, usually fused almost immediately. The condition in the living subject, when not symmetrical, might in an X-ray plate be mistaken for fracture.

Professor A. F. Dixon stated that he had made enquiries from X-rayists in Dublin, but could not find that any of them had seen the condition.

Dr. J. M. O'Connor described a method of measuring the blood flow through the ear of the rabbit, based on A. V. and A. M. Hills' calorimetric method (*Journal of Physiology*, vol. 46, p. 81). He showed records—from a research in progress—obtained by this method, which made it appear probable that the physical regulation of temperature is controlled by the temperature of the brain.

Professor W. H. Thompson read a paper on "Some further experiments on Arginin and Creatin formation in Birds."

Professor T. H. Milroy read a communication on the effect of intravenous injection of various hypochlorite solutions.

HARVEIAN SOCIETY.

Meeting held April 13th, 1906.

The President, Dr. Edmund Cautley, in the Chair.

The paper of the evening was read by Dr. McCann on

THE TREATMENT OF BACKWARD DISPLACEMENTS OF THE UTERUS.

It was stated by the author that nearly all such cases of displaced uteri caused certain symptoms sooner or later, and therefore treatment should be undertaken in the early stages. The method of replacing a uterus by means of a sound was condemned as barbarous, and forcible breaking down of adhesions without the aid of sight was stated to be dangerous. The importance of general treatment, such as massage and exercises, was emphasised.

The operative treatment of the condition was critically discussed, and the factors of age, possibility of future child-bearing, and maintenance of normal anatomical relations cited as influencing the choice of operation. Dr. McCann described two operations on the round ligaments which he had devised and used with success.

In the subsequent discusion, Dr. T. G. Stevens laid stress on the large number of congenital cases which, in his opinion, seldom caused any symptoms.

[We hope to publish Dr. McCann's paper in full in an early number.]

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Clinical Meeting held Friday, April 7th, 1916.

The President, Dr. Leonard Dobson, in the Chair.

The following cases were shown :—

By Major W. M'Adam Eccles.—(1) A living woman with dislocation between fourth and fifth cervical vertebræ (with two diagrams); accident occurred on November 28th, 1915.

By Mr. H. Tyrrell Gray—(1) Sarcoma of tibia, male, æt. 10; treated by radium. (2) "Club hand"; congenital absence of radius; bone graft; result (with diagram); female, æt. $2\frac{3}{4}$. (3) Knee-joint changes in a female child æt. 11 resembling osteoarthritis of adults; ? throat infection; (with diagrams). (4) Central tuberculosis of radius; female, æt. 4; excision of half radius; bone graft; result. (5) Carcinoma of floor of mouth; male, æt. 72

By Mr. O. L. Addison—(1) Rapidly growing carcinoma of mamma; patient æt. 39. (2) ? Tuberculosis of knee; female, æt. 45.

By Dr. T. Grainger Stewart—(1) Post-diphtheritic paralysis; male, æt. 10.

By Dr. A. J. Scott Pinchin—(1) Urticaria with dermographia; male, æt. 10.

By Dr. J. M. Bernstein—(1) Specific osteitis of tibia; female, æt. 11. (2) Polycystic kidney; female, æt. 40.

By Mr. J. G. Pardoe—(1) Carcinoma of penis; patient æt. 38.

By Dr. George Pernet—(1) Occupation dermatitis; female, æt. 17.

Dr. Reginald Morton showed several interesting skiagrams.

The President, Major W. M'Adam Eccles, Mr. H. Tyrrell Gray, Mr. O. L. Addison, Dr. Rowland Pollock, and Dr. Reginald Morton took part in the discussion which followed.

SPECIAL REPORTS.

A NOTABLE PROFESSOR.

An Appreciation of Sir A. R. Simpson, Killed in a Motor Accident.

Sir Alexander Russell Simpson, Emeritus Professor of Midwifery in the University of Edinburgh, died in the Royal Infirmary of Edinburgh on April 7th from injuries sustained in a motor accident.

Sir Alexander Russell Simpson was born in Bathgate in 1835, was educated in Bathgate Academy and Edinburgh University, where he graduated in Medicine; he thereafter pursued his studies first in Montpellier and then in Berlin. His residence in these cities perfected his knowledge of modern languages, which afterwards he turned to good account as representative of his university at the many international and other congresses at which he was a constant attendant. Like the late Principal Turner and the veteran anatomist, happily still with us, Emeritus Professor John Cleland, he was one of Goodsir's men, strongly imbued with the master's spirit of accuracy. On his return from the Continent, he became assistant to his famous uncle, Sir James Y. Simpson, of chloroform fame. On Sir James's death in 1870, Sir Alexander, the nephew, succeeded to the Chair, giving up his Glasgow practice of five years' standing to carry on his kinsman's work. His task was no light one: not only had he the disadvantage of succeeding a man of world-wide renown, but he had to "make good" as a teacher and operator against rivals of the intellectual calibre of Keith and Matthews Duncan, who were then the bright particular stars of gynæcology in the Edinburgh Extra-mural School. Gynæcology at that time was just beginning: it consisted mainly in applying wonderfully-shaped pessaries and painting with iodine; but it grew rapidly as a field of large operative procedures till it quickly became a full life's work for anyone. In the growth and development of this branch of medical art, Dr. Simpson took his full share, and at the time of his vacating the Chair he had rightly earned the name of being one of the most skilful operators in that field of surgery. Not only in the practice of his surgical department was he in the forefront, but the literature of the subject from the earliest writings to the

latest paper or pamphlet on gynæcology, here or on the Continent, was thoroughly known to him. He himself contributed largely to the growing mass of material on the new subject, and appreciation of his worth may be noted from the many honours he received from academic authorities here and abroad.

Beyond being a skilled operator and a careful teacher, he was emphatically a human man, as shown in the care of his patients and in his systematic efforts towards bettering the surroundings of student life, especially in fostering kindly personal relations between teachers and taught.

Another side of his full life was his attitude to religion. He was an earnest, deeply religious man. He had marked and active sympathy with the work of Moody and Sankey, and later of Torrey and Alexander. Foreign missions, especially medical missions, found in him a strong advocate and helper; and in the cause of temperance he was a very tower of strength in the north.

He resigned his Chair in 1905, not from any feeling of failing strength or loss of interest in his work, but to give place to "younger if not better men." Recognition of his services to medical science came to him while yet he was quick with life, and none that he treasured more than the congratulatory address which was presented to him from his former students from all over the world. His wife predeceased him a year ago, and he is survived by four sons and a daughter. One of his sons is Professor J. Y. Simpson, of the Natural Science Chair, New College, Edinburgh; a second is the Rev. H. Simpson, the well-known minister of Westbourne United Free Church, Glasgow; and a third is Dr. G. F. Barbour Simpson, Manor Place, Edinburgh.

MEDICAL PROMOTIONS AND HONOURS.

IT is announced that the King has been pleased to give orders for the following appointments, and to approve the following rewards, all dated January 1, for services rendered in connection with military operations in the field:—

C.B., Military Division (Additional Members).—Col. Henry Mackenzie Adamson, M.B., Lt.-Col. James Francis Donegan, R.A.M.C.

To be Brevet Colonel.—Lt.-Col. E. Jennings, I.M.S.

To be Brevet Lieut.-Colonel.—Maj. S. Anderson, M.B., I.M.S.

Distinguished Service Order.—Capt. Phirozshah Byramji Bharucha, F.R.C.S., I.M.S.

Awarded the Military Cross.—Capt. Reginald Charles Clifford, I.M.S., Capt. Francis Aidan Robinson, M.B., R.A.M.C., Temp. Lt. Frank Tomsman Simpson, M.B., R.A.M.C.

OBITUARY.

DR. WM. JOHN NOTLEY, B.A., M.D., SMALL HEATH.

BY the death of Dr. W. J. Notley, which occurred on April 10th, at Small Heath, there has been removed one of the oldest medical practitioners in Birmingham. Born at Brandon, Norfolk, in 1831, he was the son of the head master of the grammar school of that place, and was destined for the scholastic profession, taking his B.A. degree at the London University in 1862. He eventually decided to enter the medical profession, for which purpose he went to Edinburgh, and in 1880 took his M.B. degree at the Edinburgh University. For a time he practised in that city and coached undergraduates, but in 1883 removed to Small Heath, where he built up a considerable practice, in which he was eventually joined by his son, Mr. John Notley. From time to time he contributed papers to the *Lancet*, the most notable being "On Syncope and the Method of Averting it," "A Teaching University for London," and "Therapeutic Uses of the Hot Bath." He was for a time president of the Medical Institute, and edited the *Midland Medical Journal*. Dr. Notley was a widely read man, spoke several languages, and upon his retirement from practice about six years ago astonished his friends by setting to work to learn Italian. Failing eyesight, however, put a stop to his studies, and for the last twelve or eighteen months he was totally blind. He leaves a widow, a son, and several daughters.

DR. NICHOLAS J. NORTHEY BRAY, M.R.C.S., BARRY DOCK.

THE death of Dr. N. J. Northey Bray, of Barry Dock, occurred on April 10th. For several years deceased, who was 57, had been in failing health, but had bravely continued to practise. A native of Aberystwyth, Dr. Bray received his medical training at Guy's Hospital, and qualified M.R.C.S. in 1886. He went to Barry 23 years ago, and was very popular and greatly respected among the townspeople. He was surgeon to the Barry Accident and Surgical Hospital. A few years ago Dr. Bray took into partnership Dr. W. Rogers, who enlisted in the Royal Army Medical Corps, and is at present serving as captain with the 42nd West Lancashires, Mediterranean Force. Dr. Bray is survived by his widow, one daughter, and two stepsons and two stepdaughters.

DR. GEO. HY. ANDERSON, M.A., M.D., J.P., LOFTUS, YORKS.

A WELL-KNOWN Cleveland resident, Dr. G. H. Anderson, passed away on April 8th at the age of 73. Educated at Aberdeen, he qualified M.B., C.M. in 1865 and M.D. in 1867. He went to Eston about 1865 as assistant to the late Dr. Keith, whose daughter he married for his first wife. Forty-eight years ago Dr. Anderson went to Loftus, and practised until seven or eight years ago. He was chairman of the local Bench, and had served on the old Local Board, of which he was chairman, and the Urban Council for many years.

DR. J. K. SPENDER, M.D., M.R.C.S., L.S.A., BATH.

DR. JOHN KENT SPENDER, a well-known West of England physician, has died at his residence at Bath at the age of 88. The eldest son of the late Mr. J. Cottle Spender, M.R.C.S., he followed his father's profession, and practised in Bath till his retirement in 1895. As physician to the Royal Mineral Water Hospital, he devoted himself chiefly to the study of rheumatic affections, and occupied a prominent place among specialists in rheumatoid arthritis. He took a leading part in the development of Bath as a place of cure, and wrote several works on Bath waters, on which he was a recognised authority. His wife died over twenty years ago, and of their children, Mr. J. A. Spender, Mr. Harold Spender, and Mr. H. F. Spender have made their mark in London journalism.

LIEUT.-COLONEL C. B. PRALL, M.R.C.S., L.R.C.P., I.M.S.

LIEUT.-COLONEL CEDRIC B. PRALL, of the Indian Medical Service, has died at Mhow, India, at the age of forty-four years. The youngest son of the late Mr. Richard Prall, Town Clerk of Rochester, he received his professional education at St. Thomas's Hospital, and became M.R.C.S., L.R.C.P., in 1892. He then entered the Indian Medical Service. He served in the campaign on the North-West Frontier of India in 1897-8, obtaining mention in despatches, for taking part in the operations on the Samana and in the Kurram Valley, and also at Tirah, receiving the medal with three clasps. He retired in 1899, and in 1902 was appointed Superintendent of Prisons in the United Provinces.

DR. J. S. WARRACK has been appointed Deputy Medical Officer for the Port of London.

LITERARY NOTES.

We have received copies of the "Medical Register" for 1916, and the "Dental Register" for 1916. In addition to the official lists of registered practitioners of medicine and dentistry, the registers contain a valuable synopsis of the law as it affects doctors and dentists, a subject which is not too widely understood by the two branches of the profession.

* * *

One of the earliest of the medical journals in the United States of America to claim the attention and support of the profession in that country, *The Medical Record*, of New York, celebrates its *semi-centennial* this month. Throughout the fifty years of its existence, it has had the same publishers, and but two editors, the first one guiding its straight course for thirty-eight years. In its last weekly issue to hand, it devotes an illustrated plate to portraits of its seven contributors to its first number, bearing such honoured names as Austin Flint, Gaillard Thomas, W. Van Buren, etc., all of whom have passed over to the great majority. Our contemporary has our heartiest wishes that it may live to celebrate its centennial with a like honourable record.

* * *

We have received from Messrs. J. and A. Churchill a copy of the seventh edition of "A Code of Rules for the Prevention of Infectious Diseases in Schools," issued by the Medical Officers of Schools Association. The little brochure has been thoroughly revised, and there is every indication that an effort has been made to give effect to more modern views on infectious diseases in schools, as is evidenced by the recommendations regarding scarlet fever and diphtheria. Some of the cross references are wrong, but in other respects we have found everything most accurate and all facts succinctly stated. The booklet is extremely practical, and can be recommended to all interested in the prevention of infectious diseases in school. Its price is one shilling net.

* * *

Messrs. A. and C. Black, publishers of "Who's Who," ask us to announce a "One Hundred Guinea Competition" for war writers, in connection with their other annual publication, "The Writers' and Artists' Year Book." This prize will be awarded to the author of the best book of personal experiences during war-time. The MS. should not be less than 50,000 words in length. It need not deal with actual fighting-line experiences, but may treat of any phase of the war, from the adventures of released prisoners to the wanderings of correspondents over the war zone. The style may be humorous, thrilling, or peculiar, but freshness and originality in presentation are essential. The MS. must bear the name and address of the writer, and be sent to the Editor of "The Writers' and Artists' Year Book," 4, Soho Square, London, by July 31st, 1916. The decision of the Editor will be final, and if no MS. comes up to the standard of publication, the award may be withheld.

* * *

In a very suggestive article on "The Principles of Giving," by Mr. Andrew Carnegie, in the April number of *The Woman's Magazine*, the author mentions an important department in which great sums of money can be worthily used in the founding or extension of hospitals, medical colleges, laboratories and other institutions connected with the alleviation of human suffering, especially with the cure of human ills. No community will be pauperised by such a gift. What better benefaction than a hospital can be given to a community that is without one, on the condition that its proper maintenance be made a public institution? If hospital accommodation already exists, perhaps no better method for using surplus wealth can be found than in making additions to it. If there is a wealthy man in the land who is at a loss what to do with his surplus, let him investigate the good that is flowing from the establishment of chemical laboratories, no medical college being complete without one.

LABORATORY REPORTS.

PEPTONUM SICCUM A. AND H.
(Allen and Hanburys, 37 Lombard Street, London.)

We have received a sample of the above which is prepared for use as a nutrient in the bacteriological laboratory. Analysis shows it to contain over 90 per cent. of soluble matter—albumoses and peptone. It appears well suited for the purpose for which it is intended, and should find a wide field of usefulness in bacteriological work. The eminence of the manufacturers of this new product is a sufficient guarantee to the profession of its purity and reliability in the department for which it is designed.

MEDICAL NEWS IN BRIEF.

The late Sir Alex. Simpson.

At a meeting of the managers of the Royal Infirmary of Edinburgh on April 10th Dr. MacGillivray, the convener of the Medical Managers' Committee, made a sympathetic reference to the death of Emeritus-Professor Sir Alexander Simpson. His distinguished career, he said, what he did for the Infirmary, and how worthily he maintained the reputation of the name of Simpson in the Edinburgh Medical School, had been most adequately dealt with in the appreciation presented to the Board on his retirement from active work in the Infirmary in 1905. But it still remained for them to convey to his family and relatives an expression of their sorrow and sympathy with them in the sudden loss which they had sustained. He was a great and good man, a strenuous worker, a fine surgeon, and an able teacher, and one whose whole life was devoted to promoting the welfare of his fellow-creatures.

The Care of Clackmannan Consumptives.

Dr. Ethel Cassie, the interim Medical Officer of Health for Clackmannanshire, has just issued her annual report on the health and sanitary condition of the county for 1915. Special reference is made to pulmonary and non-pulmonary tuberculosis. Of the former 145 cases were treated, 74 being those of insured persons and the remainder uninsured persons; 27 received sanatoria treatment and 22 domiciliary treatment; 10 patients returned from sanatoria fit for work, six were much improved, and two remained at sanatoria at the end of the year. Three deaths occurred during the year, one from each group. Seventy-seven cases of non-pulmonary tuberculosis were notified during the year, as compared with 58 in 1914. Dr. Cassie states that the need for a Tuberculosis Care Committee is very marked, and that some provision for the treatment of advanced cases out of their own homes is urgently needed. Apart from bedridden cases, something in the nature of a small labour colony would be of great value, the patients being enabled to live in hygienic surroundings while doing suitable work.

Indian Medical Service Rewards.

In the House of Commons on April 11th Mr. Tennant, replying to Mr. Malcolm, stated that so far only two field officers of the Indian Medical Service had received rewards, but the lists of rewards so far published only covered the period up to April 15th, 1915. There would shortly be some more covering the period up to the end of September, 1915.

Maternity and Child Welfare in Staffordshire.

A conference between the Public Health Committee of the Staffordshire County Council and representatives of urban and rural district councils in the administrative county was held at the County Buildings, Stafford, on April 8th, with reference to a scheme of health visiting in the county.

Dr. G. Reid, the county medical officer of health, said that under the Notification of Births Act health

visitors could be appointed, infant and mother welfare centres established, together with baby clinics where minor ailments could receive attention, and, it might be, lying-in institutions for attending to difficult cases and hospitals where surgical aid might be given to mothers. What the county scheme proposed to do as a start was to appoint health visitors, but every encouragement would be given to the formation of voluntary baby welfare centres by local effort and to the appointment of care committees. The most valuable of these objects was the appointment of health visitors, because of the personal influence they would be able to exercise on the mothers and infants, and to do that the health visitor must be an experienced midwife, tactful and sympathetic. Where centres were formed she would assist in the work and give expert advice and assistance. She would also undertake the visitation of school children who were suffering from ailments, and would visit tuberculous patients in order to ascertain whether the requirements of the tuberculosis officers in regard to treatment were being carried out. Another function, recently introduced by the Local Government Board, was the visitation of patients suffering from measles for the purpose of advising mothers as to the best method of dealing with the sufferers.

Missing Medical Cards.

At the meeting of the Staffordshire Insurance Committee, Dr. Tibbetts called attention to the delay in the issuing of medical cards to insured persons on entering insurance, and he moved that the committee should institute a full inquiry as to the prevalence and causes of and remedies for delay in the issue of medical cards. He said that some patients went to panel doctors for treatment, and when asked for their medical cards could not produce them, and the doctors were thus placed in a difficulty, as they could not legally attend any insured person unless the medical cards were produced. He thought the only way out of the difficulty was that at the time a stamped card was given to an insured person he or she should at the same time be given a provisional medical card for presentation to the doctor if illness came on.

The question was referred to the Medical Benefit Committee for consideration and report.

No Medical Inspection of School Children.

At the monthly meeting of Wick Burgh School Board it was stated that Dr. Bremner, Medical Inspector for School Children for Sutherlandshire, who had taken over the work of Dr. Dick, Medical Inspector for Caithness, in the latter's absence on military service, had abandoned medical inspection of children in both counties, and that no charge would be made for same by the Secondary Education Committee from the time that Dr. Dick ceased work.

No Mating with Germans.

Sir James Crichton-Browne, speaking at a meeting held by the Sociological Society on April 4th, said that from this time forth, and for a hundred years to come, it should be considered eugenically disgraceful for any English man or woman to marry a German. The history of this war had proved that the Germans were a depraved and morally degraded people, with whom we should have no mating. The Germans were undoubtedly infected with a foul moral taint, and until they had cleansed themselves—and it would take three generations to do that—we should keep clear of them.

Sheffield Cancer Research.

An interesting report of the work that has been accomplished in connection with the Sheffield Radium Institute was furnished at the annual meeting of the Radium Committee, held on April 4th. The movement was set on foot in the spring of 1914, when, in response to an appeal from the honorary medical staffs of the four voluntary hospitals in Sheffield, £8,629 was subscribed for the purchase and employment of radium in the treatment of malignant disease. Owing to the scarcity of radium and the difficulty of securing an early delivery, it was not possible to obtain a supply for Sheffield until the end of 1914, and a further delay was caused by the necessity for applying prolonged tests to make quite sure that the material purchased was of the amount and quality stipulated for. The amount purchased was equal to 500 milligrams of radium bromide at a cost of £6,891 6s. 8d.

Major Rupert Hallam, Honorary Medical Director, in his report referred to the fact that the first year was the experimental stage, and mentioned that the war had interfered with the obtaining of the laboratory apparatus necessary. Owing to the extensive depletion of hospital staffs, the number of cases treated was not normal, but in spite of drawbacks very useful work had been done, and it was a most hopeful method of treatment for inoperable cancer. In all 127 applications of the radium had been made.

The report of the Executive Committee stated that the actual work of treating with radium began early in March, and had continued uninterruptedly since then. Major Hallam had, they believed wisely, adopted a cautious attitude in speaking of the curative properties of radium in advanced stages of malignant disease. A period of several years must necessarily elapse before an apparent cure could be accepted as a permanent one.

Disease from the Front.

At a meeting of the Bolton-on-Dearne Urban Council on April 11th the lady health visitor reported that the district had been somewhat troubled with scabies, which had necessitated the exclusion of several children from school. This disease, she said, was being brought home from the front, and must not be thought to be due to neglect or dirtiness.

Generals' Ages.

The generals of the German Army are much older than those of either France or Britain. The average age of the British is 53.9 years, that of the French 60.5 years, and that of the Germans 63.5 years. If the royal German generals were excluded the average of the rest of the ages would be 65.66. The average of the Allies is 57.2 years.

State Bread.

The New South Wales Legislative Assembly has passed, by 27 votes against 25, the third reading of the Bread Monopoly Bill, which establishes a State monopoly for bread making and selling in New South Wales. The proposal has met with a good deal of opposition in the State.

The Royal Society of Medicine.

The library and offices of the Society will be closed from Thursday, April 20th, to Tuesday, April 25th, both days inclusive.

War Babies.

Describing the special work of the Local Government Board arising out of the war, Mr. Walter Long, the President, in the annual report states that having regard to the allegations which were being made as to the probability of a large increase in the number of illegitimate births in consequence of the presence of large numbers of troops in certain districts, special investigation was instituted in the matter by the Department. A large amount of information was received from numerous sources, and a report on the subject was prepared by the Department. The conclusion was arrived at that the statements which had been made on this subject were generally ill-founded and that there was likely to be little, if any, increase in the number of illegitimate births.

Medical Men and War Service.

In the House of Commons on April 12th Sir John Lonsdale (U., Mid-Armagh) asked the Under-Secretary for War if he was aware that there were a number of practising physicians and surgeons above the age of 45 who would be willing to volunteer for special and general service at home, and thus enable the War Office to free active service men for work at the front; and if the War Office would officially invite all medical men, without limitation of age, to offer their services for the period of the war under a scheme

which would ensure proper recognition and due consideration of the special qualifications of practitioners who volunteered.

Mr. Tennant replied that medical men between the ages of 45 and 55 were being employed as commissioned officers for general service in the United Kingdom. Doctors over 55 might offer their services for local employment to the general officer commanding-in-chief of the command in which they were living, or in which they desired to do duty with troops. He thought the hon. baronet and his medical advisers were really at one in this matter. In other words, the policy should be that the medical men of more advanced years rendered the country the better service by undertaking the care of the civil population, and thus setting free those of military age who were physically fit for duty at home or abroad.

Efficiency of the R.A.M.C.

In the House of Commons on April 12th Mr. R. McNeill asked the Under-Secretary for War if he would appoint an independent committee to examine into and report on the organisation and working of the Army Medical Service at home and abroad.

Mr. Tennant: I cannot undertake action which in my view would only have the effect of dislocating and perhaps disorganising a most efficient piece of mechanism.

Mr. McNeill: Is the right hon. gentleman aware that a considerable number of officers of the Royal Army Medical Corps serving at the front endorse the suggestion which I ventured to make some weeks ago in the House?

Mr. Tennant: As my hon. friend has not thought it right to send me the letters, naturally I could not possibly have the information which he has acquired.

Gifts for Welsh Hospital.

Four donations of 1,000 guineas each to King Edward VII. Hospital, Cardiff, for the endowment of beds, have been received from Messrs. Spillers and Bakers (Limited), the Nixon Steam Navigation Company (Limited), Mr. Samuel Instone (of Messrs. C. Instone and Co. (Limited), and a governor of the hospital, on behalf of his brothers, sister, and himself; and Messrs. L. Gueret (Limited). These gifts make twelve such endowments since May last.

Mr. J. Herbert Cory, M.P., forwarded £43 3s. 6d., part of his Parliamentary salary, which he is dividing between the King Edward Hospital and Cardiff Seamen's Hospital.

Doctors and Motor Car Tax.

At a meeting of the Executive Committee of the National Medical Union on April 13th the following resolution was passed:—

"That owing to the great amount of public work, both military and civil, now being done by medical men, and the use of the motor as a means of accomplishing that work being indispensable, it is urged by the National Medical Union that no further burden of taxation be imposed upon the medical profession in connection with the proposed increased taxation of motor-car and motor-cycles, or with reference to the taxation or limitation of the supply of petrol.

It was also resolved that a copy of the resolution be forwarded to the Chancellor of the Exchequer.

Royal Colleges of Physicians and Surgeons of England.

At the quarterly examination in Practical Pharmacy, held in connection with the Royal Colleges of Physicians and Surgeons of England on April 6th and 7th, the following candidates were approved:—

Abdul M. Ahmad, B.A. Cantab; F. E. Bendix, L.D.S. Eng.; I. R. R. Brogden, B.A. Cantab; G. E. Burton, B.A. Cantab; H. A. Chodak, A. B. Dummere, J. R. K. Fenning, G. H. FitzGerald, F. C. A. Frith, T. H. Gunewardene, N. H. Harrison, L.D.S., S. G. Harrison, W. S. Herman, B.A. Cantab, L.D.S.; D. L. Lees, H. S. N. Menko, F. M. Moseley, B.A. Cantab; W. P. Nelson, A. L. Packham, L.D.S., D. F. Panton, London Hospital; W. H. A. Pratt, J. S. Ranson, C. N. Ratcliffe, J. J. Redelinghuys, Florence M. Rhodes, A. H. Richardson, N. F. Smith, B.A. Oxon; C. H. Terry, B.A. Oxon; W. J. Walters, B.A. Cantab; H. P. Warren, I. G. Williams, B.Sc., S. Winnick, Geoffrey Winter, S. A. Withers, and A. F. Wyatt.

London School of Tropical Medicine.

The following candidates passed the examination of the London School of Tropical Medicine at the termination of the January-April session:—

Distinction.—W. N. Leak, M.R.C.S., L.R.C.P., and H. Bayon, M.D. (Genoa). (Dr. Leak gains the "Duncan" medal awarded to the student who obtains the highest aggregate of marks.)

Passed.—Miss V. G. Field, L.R.C.P. and S. (Edin.); E. A. Blok, L.R.C.P. and S. (Edin.), L.F.P. and S. (Glas.), L.M.S. (Ceylon); and J. A. Beels, M.D.

MEDICAL WAR ITEMS.

Lieutenant James Coutts, M.B., Royal Army Medical Corps, wounded, is a Glasgow doctor, who took his degree in that city in 1906. He has held the rank of lieutenant since May of last year.

Lieutenant John Moir MacKenzie, M.B., Royal Army Medical Corps, wounded, lived in the neighbourhood of Aberdeen, where he took his medical degree. He has been serving as a doctor in the Army for exactly a year.

Major Robertson Stewart Smyth, M.D., Royal Army Medical Corps, who was invalided home from the front in December last, has died at a nursing home in London. He was the fourth son of the late William Smyth, of Brookfield Lodge, Banbridge, and Mrs. Smyth, and was educated at Dungannon Royal School and Trinity College, Dublin. He was captain of Dublin University Rugby Club, and represented Ireland against England in 1903 and 1904, and against Scotland in 1903. He entered the Royal Army Medical Corps in July, 1905, and was promoted captain in January, 1909, and major in October last. He went to the front in September, 1914, and served until December last. He was mentioned in despatches by Lord French for gallant and distinguished service in the field.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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Small announcements of Practices, Assistances, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Original Articles or Letters intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

DEAR MILK.

In view of the increased price of milk, the Lambeth Guardians have arranged to use more condensed milk, and have ordered 37,500 tins.

ARMY MEDICAL SERVICE.

10,659 medical men hold commissions in the Army.

THE TRICKSTER.

A DOCTOR stated at Clerkenwell County Court that he had a friend, a doctor, with an artificial leg, who could do trick riding on a bicycle.

BATH WAR HOSPITAL.

BATH War Hospital, at Combe Park, with the Lansdowne Cricket Club ground for recreation, is now open for patients. The Hospital has been built and equipped by the War Office from the designs of Mr. H. B. Measures, F.R.I.B.A., Director of Barrack Construction.

PROOF OF INSANITY!

MORE than £20 in gold was found in the pocket of a mentally deficient patient on his admission to Bishop's Stortford Infirmary.

DR. MULLIGAN (Millbank) will please accept our best thanks for his communication. The other matter has been adjusted as desired.

THE CERTAINTY OF DEATH.

MR. WILLIAM EDWARD BOOTHBY-HEATHCOTE, of Chingford, Essex, and York, who died on December 13th, directed that, after a doctor had certified his death, his heart should be transfixed with a proper surgical knife, and his body buried with the knife in his heart.

DR. A. H. MILLAR (Dundee).—Proof of your article will be sent you this week for correction.

FLYING TO THE GRAVE.

AT the dinner of the Aeronautical Society of America, the head of one of the largest undertaking concerns in New York announced that he was preparing to conduct funerals by aeroplanes in the near future. "To be in style," he said, "one must make arrangements to have mortal remains carried on a swift, sombre-hued biplane to the final resting-place." He declared that the roof of his establishment would soon be fitted with a landing-stage for aircraft, and "all conveniences for mourners."

ROYAL FREE HOSPITAL.

MR. ARTHUR DU CROS, M.P., has promised a gift of £7,000 to the Extension Fund of the London (Royal Free Hospital) School of Medicine for Women, thus completing the £30,000 for which an appeal was made.

ANGLERS' RED CROSS GIFTS.

Two Red Cross motor-ambulances, subscribed for by the angling societies of the United Kingdom, will be formally presented in May.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, APRIL 19TH.

ROYAL MICROSCOPICAL SOCIETY (20 Hanover Square, W.).—8 p.m.: Professor B. Moore: Early Stages in the Evolution of Life. Mr. F. M. Duncan: Studies in Marine Biology. Mr. J. W. Purkiss: Some Suggestions regarding Visual Efficiency in the Use of the Microscope and other Optical Instruments.

Vacancies.

Leeds Public Dispensary—Lady Resident Medical Officer. Salary £130 per annum, with board, residence, and laundry. Applications to the Secretary of the Faculty, Public Dispensary, North-street, Leeds.

Hulme Dispensary, Dale Street, Stretford Road, Manchester.—House Surgeon. Salary £250 per annum, with apartments, attendance, coal, and gas. Applications to Honorary Medical Secretary.

Bury Infirmary.—Senior House Surgeon. Salary £250 per annum, with board, residence, and washing. Applications to the Honorary Secretary, Infirmary, Bury, Lancs.

Victoria Hospital, Burnley.—Female House Surgeon. Salary £160 per annum, with residence, board, and washing. Applications to F. A. Hargreaves, Hon. Secretary, 7 Grimshaw Street, Burnley.

Township of Toxteth Park.—Assistant Resident Medical Officer. Salary £300 per annum, with board, washing, and apartments. Applications to R. Albert James, Clerk to the Guardians, 15 High Park Street, Liverpool.

Putney Hospital (Chester Bequest), Lower Common, Putney, S.W.—Resident Medical Officer. Salary £150 per annum, with rooms, board, and laundry. Applications to the Hon. Secretary, 198 Upper Richmond Road, Putney, S.W.

Cambridgeshire Asylum, Fulbourn, near Cambridge.—Junior Assistant Medical Officer. Salary £200 per annum, with board, lodging, washing and attendance. Applications to the Medical Superintendent.

The Royal Infirmary, Sheffield.—House Physician. Salary £120 per annum, with board and residence. Applications to Jno. W. Barnes, Secretary.

St. Bartholomew's Hospital, Rochester.—Senior Resident House Surgeon. Salary £300 per annum. Applications to Charles Speyer, Secretary.

Chesterfield and North Derbyshire Hospital.—Second House Surgeon. Salary £150 per annum, with board, apartments, and laundry. Applications to the Secretary.

Appointments.

GOTELEE, H. E., M.R.C.S., L.R.C.P., District Medical Officer of the Newton Abbot Union.

JOYCE, H. W., L.S.A., District Medical Officer of the Mansfield Union.

LINDSAY, JOHN KERR, L.R.C.P. & S.Edin., L.F.P.S.Glasg., District Medical Officer to the Bristol Board of Guardians.

MAINS, J. H., L.R.C.P.Lond., Certifying Factory Surgeon for the Clackmannan District, co. Clackmannan.

PROCTOR, S. P. P., M.B., Ch.B.Edin., District Medical Officer of the Chesterfield Union.

TIBBLES, W., L.R.C.P.Edin., M.R.C.S.Eng., District Medical Officer of the Nottingham Parish.

TURNER, WILLIAM, M.S., F.R.C.S., Surgeon to In-patients to Westminster Hospital.

Births.

FAULKNER.—On April 14th, at The Rectory, Stanford-le-Hope, Essex, to Captain Cyril D. Faulkner, R.A.M.C., and Mrs. Cyril D. Faulkener (*née* Hilda Marion Russell)—a son.

MAY.—On April 12th, at The White House, Sonning, Berks, to Dr. and Mrs. Norman May—a son.

POLLARD.—On April 10th, at Southsea, Mary (née Coghlan), the wife of Capt. A. M. Pollard, R.A.M.C., of a son.

REICHARDT.—On April 4th, at Dorset House, Ewell, Surrey, the wife of E. N. Reichardt, M.D.Lond., of a son.

WHEATON.—On April 9th, at 17, Rastell-avenue, Streatham Hill, S.W., the wife of S. W. Wheaton, M.D., F.R.C.P., of a daughter.

WILLIAMS.—On April 12th, at Bankside Nursing Home, Hendon, Nina (*née* Humphreys), the wife of Captain Charles Eustace Williams, R.A.M.C., of a daughter.

Marriages.

CRAWFORD—JENNY.—On April 12th, at Christ Church, Woburn Square, London, Thomas Maitland Crawford, Lieutenant, R.A.M.C., seventh son of the late Sir Thomas Crawford, K.C.B., (late Director-General, A.M.D.), to Mabel Gertrude Louise Jenny, only daughter of the late Jaques Jenny and Mrs. Jenny, of London.

DENHAM—BRIGGS.—On April 11th, at Trinity Presbyterian Church, Kensington, Captain Charles Holmes Denham, R.A.M.C., elder son of J. Knox Denham, J.P., F.R.C.S., of Dublin, to Irene, youngest daughter of the late James Cronshaw, of The Firs, Cheadle, Cheshire.

HAMILTON—ZIEGLER.—On April 14th, at St Saviour's Parish Church, Alexander Keith Hamilton, Temp. Captain, R.A.M.C., to Frances, second daughter of the late W. H. Ziegler, and of Mrs. Ziegler, Oxton, Cheshire.

MACINTYRE—LYMBERY.—On April 6th, at Ashbourne Parish Church, by Revd. Canon Morris, M.A., David Duncan Fraser Macintyre, M.B., Surgeon, R.N.V.R., and Board of Trade, to Sarah Elizabeth Lymbery, late Queen Alexandra's Royal Naval Nursing Service.

RAIKES—LEWIN.—On April 6th, at St. Mary's, Plaistow, Bromley, Kent, Captain John Walter Julian Raikes, R.E., second son of Canon Raikes, of Goudhurst, to Phyllis Margaret, daughter of Lieutenant-Colonel W. H. Lewin, Indian Army, of Dorunda, Bromley, Kent.

SACKVILLE MARTIN—GLADSTONE.—On 3rd April, at St. Paul's Church, Valetta, Malta, Captain James Sackville Martin, R.A.M.C., of Leigh, Lancashire, to Florence Gladstone, eldest daughter of the late C. E. Gladstone, Bengal Civil Service, and Mrs. Gladstone, Roseneath, Jersey.

SMITH—MALLINSON.—On April 11th, at Walthamstow, Philip Smith, Captain, R.A.M.C., of Bromley, Kent, to Evangeline Dorothea, younger daughter of William Mallinson, J.P., The Limes, Walthamstow.

WATSON—MONSON.—On April 15th, at Holy Trinity, Kingsway, W.C., Dr. C. E. S. Watson, S.M.O., of the West African Medical Service, youngest son of Mrs. Watson, of "Southolme," Forest Hill, S.E., and the late George Peregrine Watson, of Demerara, to Kathleen Rowena, youngest daughter of Edward Monson, J.P., F.R.I.B.A., and Mrs. Monson, of Grosvenor House, Acton Vale, W.

WILSON—MOTTERSHALL.—On April 12th, at the Church of St. Bartholomew the Great, London, Walton Ronald Wilson, Lieutenant, R.A.M.C., only son of Dr. and Mrs. Wilson, Forest Hill, to Emily Constance Mottershall, niece of Mr. and Mrs. Walter Southern Hunt, "Castle Mount," Eastbourne, formerly of "Castle Mount," The Park, Nottingham.

Deaths.

BRICE.—On April 5th, at Swansea, Major Ernest Brice, R.A.M.C., M.R.C.S., aged 52.

COLE.—On April 11th, of wounds received on March 22nd, Major A. H. Cole, F.R.C.S., third son of Dr. H. H. Cole, M.D., F.R.C.S.Eng., of Leamington, aged 44 years.

CROSBY.—On Friday, April 7th, after a few days' illness, Alderman Sir Thomas Boor Crosby, Alderman for the Ward of Langbourne, in his 86th year.

FITZGERALD-POWELL.—On April 5th, H. FitzGerald-Powell, M.D., F.R.C.S., Surgeon, Throat Hospital, Golden-square, W., of 5 Harley-street, Cavendish Square W.

HANBURY.—On Tuesday, April 11th, at the Manor House, Little Berkhampstead, near Hertford, Cornelius Hanbury, in his 89th year.

PRALL.—On Wednesday, April 5th, at Mhow, India, Cedric Barkeley, Lieutenant-Colonel, I.M.S., youngest son of the late Richard Prall, Town Clerk of Rochester, aged 44 years.

SPENDER.—On April 14th, at 34 Marlborough Buildings, Bath, J. K. Spender, M.D., aged 86.

TANDY.—On April 10th, at Mount Pleasant, Northam, N. Devon, Edward Ord Tandy, Colonel, I.M.S. (retired).

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

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AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

Tax on Mineral Waters.

THE Chancellor of the Exchequer has, I am glad to see, withdrawn the railway tax, which, as I pointed out the week before last, was by no means unobjectionable from the point of view of the public health. It is very much to be hoped that he will see his way to withdraw the proposed duty on imported mineral waters. Such a duty cannot be expected to contribute anything of importance to the revenue, for the reason that its chief effect would be to smother the trade. Before the war the bulk of the trade in bottled mineral and table waters was in the hands of enemy countries. In spite of the disappearance of German competition, the circumstances of the war have already pressed heavily upon the trade from France. Freights have increased and the price of bottles has risen, male labour has disappeared and consumption has diminished. Our friends were, nevertheless, in the fairway of capturing the trade. The duty will completely abolish the advantage which the French waters were thus beginning to obtain, so that, if only on international grounds, it is objectionable.

Gaseous and Others.

IT is also objectionable on medical grounds. Mineral waters are not a pure luxury. Even the bubbly waters, especially when, as in the case of Perrier, they are bubbly by nature, have, in the opinion of many, some very conspicuous dietetic merits. Many of the French waters are, however, medicinal waters, and they are medicinal in a way that no one has ever claimed to be able to imitate in the laboratory. Vichy water, for example, whose chief ingredient is bicarbonate of soda, produces effects to which ordinary solutions of that salt cannot pretend. The waters of Contrexéville and Vittel admittedly possess curative properties in renal affections, the secret of which no chemical analysis has yet revealed. Evian-Cachat water is a diuretic water of real efficacy, and it shares with the water from the Source des Deux Reines at Aix-les-Bains a reputation in gouty, rheumatic and arterial diseases with which none of our home waters can pretend to compare. It is not in the public interest that the importation of these waters should be checked. They are therapeutic and prophylactic agents of great value, for which there are no substitutes in these islands.

Patent Medicines.

IF the Chancellor of the Exchequer is "out" to kill a trade by a smothering duty, he might surely once more turn his attention to patent medicines. In last week's issue there appeared a letter on this subject which deserves careful perusal. It is from the pen of Mr. Henry Sewill, than whom no one has a more intimate and peculiar knowledge of the whole question. Mr. Sewill says that "these condemned concoctions were enough to render the patent medicine trade, as a whole, an improper source of revenue." With this I cannot altogether agree. It appears to be an axiom of British law that, in matters of health, a man is at liberty to trade on the credulity of the public. To abolish this axiom would require a revolution; to abrogate it would provoke a revolt; but there seems to be no reason why those who benefit by this form of liberty should not contribute handsomely to the State which confers it. It is, I fear, too much to ask of any Government that it should protect the British public to the point of abolishing patent medicines; but it is quite reasonable to demand that both purveyor and consumer should pay for the luxury, in the one case of deluding, in the other of being deluded. In these days of new-found fervour for child welfare, might it not be a good thing to give a deterrent legislative eye to the sedatives which nurses secretly buy and surreptitiously administer to their innocent charges?

Dogs.

IT is to be hoped that a further effort will be made to induce the Chancellor to cull some of his much-needed money from the fertile, futile and effeminate field of the town-dwelling dog-owner. Here is a luxury, a most unneighbourly one, a luxury fraught with serious potential dangers to the public health, a luxury which is in the highest degree wasteful of the food for which many human beings are vainly crying out, a luxury which makes unnecessary work at a time when labour is scarce; yet nothing is done to make it contribute any more in war time than it did in peace-time. I don't know who is responsible for the placards which have the self-satisfied effrontery to tell people what is,

and what is not, "good form," nor who pays for them; but this I do know, that if the ingenuity and money which they represent were directed to a campaign against the useless and dangerous extravagance of dogs in large towns, some real good to the community might ensue.

Mr. Tennant and Mr. Barker.

In the *Daily News and Leader* for April 12th there is published the correspondence between Mr. Tennant, the Under-Secretary for War, and Mr. H. A. Barker, "the well-known bonesetter," which is reproduced in another column. The first thing that strikes one about this correspondence is the personally sympathetic tone which graciously irradiates from Mr. Tennant's letter. That may be an example of "the new style" evoked by the war; it is certainly, to say the least, most unusual in official letters from a Government Department. Mr. Barker, in his reply, says: "As you may perhaps be aware, the whole of my career has been devoted to a branch of therapeutics which —on the admission of some of the most distinguished practitioners of the day—has been neglected by the surgical schools." It would be interesting to know the names of these "most distinguished practitioners," also when and to whom they have made these engaging admissions. At the end of the letter Mr. Barker writes as follows: "I cannot but strongly protest against the professional prejudice which really alone bars the way to my rendering the service I desire, but which does not prevent medical men and their families from seeking privately, at my hands, the relief they are officially withholding from others." Again I say it would be interesting to have some names and testimonials.

Qualification and Unqualification.

It is not that names and testimonials would in any degree affect the principle, which is, indeed, sufficiently well understood both by the profession and by most sane members of the public to require no insistence from me. The question is purely one of qualification or no qualification. Both states have their advantages and disadvantages, but you must choose which you will have. In this, as in most other matters, you cannot have the best of both worlds; you cannot have the world of unqualification plus official recognition, any more than you can have the world of full qualification with the freedom from responsibility and disciplinary measures which the absence of a diploma confers. That Mr. Barker should wish for the best of both worlds only shows him to be as human as the rest of us; the extraordinary thing is that his request in this matter should be taken seriously and treated sympathetically by a Minister. Imagine an "unqualified lawyer" presenting a request for legal employment to the Lord Chancellor, one of the Law Officers of the Crown, or one of His Majesty's judges; and picture to yourself, if you can, the dignitary so approached writing thus to the unqualified applicant: "A refusal to accept your offer ought not to be considered as anything in the nature of a slur on your abilities." Yet, if we may believe the *Daily News and Leader*, these are the very words used by Mr. Tennant, the Minister, to Mr. Barker, the bonesetter.

The Profession and the Authorities.

It is surely high time that our long-suffering profession were represented in Parliament by someone with the energy and courage to characterise this kind of thing as it deserves. If the profession were really the trade union which Mr. H. G. Wells says it is (which it is not at present, but which it very likely will be driven to be in the future) a letter such as this of Mr. Tennant's would immediately be followed either by an apology or a strike. Governments and public officials must not imagine that they will always be able to play fast and loose with a self-respecting, self-sacrificing profession, whose members conform to Governmental regulations at the daily risk of their lives, and who ask in return no more than a recognition of their status and an acknowledgment of the value of their services to the community. As things now are, what happens? At a time when every informed person is glad and proud to eulogise the services of the profession to the military, and to the civil population, the Minister who is, in a sense, one of the heads of the very service to which medical men have by common consent shown the greatest devotion and rendered the most invaluable aid, is found publicly bowing and scraping to an unqualified "bonesetter," thanking him for his offer, "which I do with sincerity," and hinting that, did the military regulations allow, the said "bonesetter" would be given a free hand upon the suffering soldiery. It is nothing short of an outrage.

Orthodoxy and Dissent.

It is bad enough that the nonsense of unqualified practice should obtain support in the otiose *parvenu* circles from which Mr. Tennant derives, but it is a grave scandal that it should penetrate into official or semi-official pronouncements. We can afford smilingly to concede to certain over-fed and over-exposed ladies the luxury of being persuaded into dietetic and other forms of restraint by Christian Scientists and Higher Thoughtists; we can look with indulgence upon the degenerates who listen with trituratic fervour to Mr. Eustace Miles' pseudo-scientific siftings from the scullery; even as we can hearken with amused equanimity to the plaintive treble of the conscientious objectors who follow Mr. Stephen Coleridge when he valiantly advances against vaccines. These are dissenters who, whether their dissidence be mercenarily motived or otherwise, are clearly entitled to such indulgence as is due to dissent openly declared. But an Under-Secretary for War stands for orthodoxy, and whatever be the private predilections of a Mr. Tennant, the public pronouncements of a Minister should reveal no suspicion of heterodoxy. It is a pity that Mr. Tennant should have been led into a departure from this rule, which, although it is unwritten, is nevertheless obviously salutary; and it ought to be binding.

Sinapis.

Miss Gertrude Langton, of Liverpool, left £300 each to the Bluecoat Hospital, Liverpool, and the Infirmary for Children, Liverpool.

OF CHILLS AND CATCHING COLD.

The appeal to antiquity is a potent factor in the life of the cultured; and respect for authority, whether based on reason or otherwise, is the lodestar of more than one-half of Christendom. In matters artistic the pre-eminence of the ancients is still pre-eminent; in matters theological the authority of the Churches still dominates. In matters scientific, however, neither the wisdom of the one nor the influence of the other can be permitted unchallenged recognition; nor can we even admit that the saws and dicta of our forefathers in medicine shall be allowed to escape the busy sieve of advancing knowledge. Prejudices and preconceived notions everywhere die hard, and nowhere harder than in pathology and practice. Of this, no better example could be adduced than the attitude which is still adopted by the public, and by the profession which in these matters educates the public, towards the commonest of common ailments—namely, the common cold.

An attack of nasal catarrh or coryza, more often than not, is ushered in by a feeling of chilliness. The immediately succeeding attack, being a "*post hoc*," became in the minds of the microbically uneducated a "*propter hoc*," and a "chill" was asserted to be the cause of that which was christened a "cold." This topsy-turvey reasoning gave rise to a practice which of all hygienic heresies has proved the most devastating to the human race. The warm, still atmosphere of the house, the warm flannel clothing of the child, the closed door and the hermetically sealed window of the office and the railway carriage, the poison-charged air of the public building and the workshop—all of these and similar have contributed and created and circulated all manner of deadly infectious disease, of which the most frequent is by far the most deadly—the pale and pitiless spectre-eyed tubercle. The hand that rocks the cradle rules the world. The unwashen hand of the ordinary nursery nurse, physically and morally the most insidious and tyrannical enemy of every rising generation of the upper human race, has been guiding our hygienic practice from times immemorial, apotheosing chills, eschewing draughts, closing our nursery windows, over-feeding and over-clothing our children, and to-day, though we are tardily awakening to the appalling waste of infant and child life, we still turn a blind eye to perhaps its most potent cause. The disingenuous wonder why, and appoint Royal Commissions. But the reason is here, to hand. The nursery nurse believes in chills as a cause, and colds as a consequence. Her practices are in keeping with her theories. There is joy and rejoicing among the microbes, and death and devastation among the children.

The nursery nurse has unfortunately received much support from the profession. The advice of the shrewd, but not over scrupulous teacher, who advised his students, when they should find themselves in doubt as to the diagnosis of a childish ailment, to take the opinion of the nursery nurse and acquiesce therein, has been followed all too slavishly. Nevertheless, during the last twenty years occasional voices have been raised against the supremacy of chills. Logically, the successful open-air treatment of pulmonary tuberculosis was its death warrant, but the sentence has not been carried out. As a nation we are not given over to logic; we prefer to muddle through to the point where we adopt panic panaceas. But the execution of the death sentence on the chill causation of disease in general, and colds in particular, cannot now much longer be delayed. The text-books are beginning to speak, and, if we may judge by one of them, the most recent, they will soon be yodelling in no uncertain unison.

The new edition of Sir St. Clair Thomson's book (*a*) contains a chapter "On Taking Cold," which sets forth, not argumentatively as though there were a ghost to be laid, but pontifically as though no discussion were admissible, the scientific aspect of this important matter. The chapter is in every way admirable; it will certainly be largely quoted—by some frankly, by others furtively; and having regard to the authority of the writer there is hope that the profession will now adopt the true faith which may gradually permeate the public, and eventually attain that grim citadel of tyrannical ignorance, which is the nursery of the well-to-do.

Defects and disease in the upper air passages are a very powerful cause of disease in other parts; not only in the lower air passages, but in the intestinal tract and elsewhere. In medicine, no speciality is, even approximately, an exclusive study. As Courty says in the passage which is quoted on the fly-leaf of this book, "La spécialité est le dégré le plus bas de l'art, lorsqu'elle n'est pas fecondée par les connaissances générales; elle en est la perfection lorsqu'elle est le couronnement de la science. Il faut finir au lieu de débuter par elle." The interdependence of the various parts of the human organism is nowhere more forcibly exemplified than by the length of reach of this comparatively recent speciality, with which, from the fact that he served a long and arduous apprenticeship to general practice, no one is better qualified to deal than Sir St. Clair Thomson. If ever a special treatise was "fecondée par les connaissances générales" it is this one; indeed, if the book had been called "The Influence of the Upper Air-passages upon Health and Disease" no one could have cavilled at the title. When we consider that the normal nasal passages contain the filtering ground for the air which, on reaching the lungs, is to debarras the blood of its impurities, it is not difficult to realise that the physiological integrity of that airway is among the most important factors in the formation of stamina and the maintenance of health. When we have studied some of the well-drawn diagrams of the nasal cavities and accessory sinuses with which this book is so well and profusely supplied, we awaken to the fact that the individual evolution of the brain must depend, in part at least, upon the proper development of the bones which bound these spaces. To gaze upon the pictures of the pectoral effects of

(*a*) "Diseases of the Nose and Throat, Comprising Affections of the Trachea and Œsophagus," by Sir St. Clair Thomson, M.D., F.R.C.P., F.R.C.S. Lond. Cassell and Co., 1916.

nasal obstruction is to appreciate the fact that the blockades of adenoids, polypi, deviations of the septum, and the like, are among the most efficient means of preparing the human soil for the reception of the eagerly crouching microbe. Liberty of the nasal passages is worth fighting for, and Sir St. Clair Thomson fights valiantly.

As a text-book on the subject of which it treats with so much lucidity, Sir St. Clair Thomson's book deserves unqualified commendation. For lucidity is the keynote of its appeal. From the perusal of any section the reader carries away an indelible picture of what he has been told, and the telling not infrequently includes phrases which strike, impress and remain. The subject ramifies—it ramifies into territory undreamed of when the speciality was first evolved—but the lines of ramification are scientifically illuminated by clear thinking and unusually graceful writing.

L. B. W.

CURRENT TOPICS.

Incurable Soldiers and the War Office.

MR. H. J. TENNANT, Under-Secretary for War, has addressed the following letter to Mr. H. A. Barker, the well-known bonesetter, who asked: "If the Army medical authorities had definitely refused to accept his services, that at least those cases which came within his sphere of work and which had been finally relinquished as incurable might be placed under his care" :—

"Dear Sir,—I have to thank you for your two letters of the 30th of last month. I find myself in a position of no small difficulty, which I think you must be able to realise. A refusal to accept your offer ought not to be considered as anything in the nature of a slur upon your abilities, and yet anything but a refusal would open the doors for the admission of many others whom I am sure you would consider to be quite undesirable persons.

"It is, indeed, impossible for so great a machine as the Army to proceed upon lines which you might call unofficial. Any endeavour to do so would lead us into an almost hopeless position. If you would be good enough to try to visualise our position, I do not think you will be able to come to any other conclusion.

"In these circumstances I have no other course open to me but to thank you for your offer, which I do with sincerity, and to express my regrets that I can hold out no hope that the decision which I announced is otherwise than definite and final."

In reply, Mr. Barker wrote:—"I fully understand and sympathetically appreciate the difficulties which confront you in your official position respecting my offer, but I do not see that any acceptance of my services need necessarily 'open the doors for the admission of others,' unless they could produce the evidence in support of their claims that has been presented in support of mine.

"As you may perhaps be aware, the whole of my career has been devoted to a branch of therapeutics which—on the admission of some of the most distinguished practitioners of the day—has been neglected by the surgical schools. Such neglect has been, and is, responsible for an appalling amount of avoidable suffering, and it is this suffering amongst soldiers and would-be soldiers that I have sought permission to relieve. If surgeons themselves were affording this help I should be silent; but as they emphatically are not doing so, I cannot but strongly protest against the professional prejudice which really alone bars the way to my rendering the service I desire, but which does not prevent medical men and their families from seeking privately at my hands the relief they are officially withholding from others."

A Doctor's Heroism.

UNDER the above title a paragraph has been going the rounds of the daily papers. It states that the Rev. Bernard J. Snell, M.A., B.Sc., has had a thrilling incident told to him in a letter written by his son, who is a wounded officer in France. Some wounded men were in an almost inaccessible place, and the doctor was forbidden to go to them. But he ran the gauntlet of 300 yards in the open and reached the party of wounded. He amputated two limbs and bound up the wounds of the other men as best he could. Finding that the best service he could render was by going back, he rushed across the open, and, just as he was reaching the home trenches a German bullet struck him in the heart, and he fell into the arms of Mr. Bernard Snell's son. "Oh, the cloud that came over all of us," said the writer, "when we realised that the man had given his life, not called by duty, but only by heroism, and by that unspeakable, indescribable impulse that dwells in men at their best!" We take it that the medical man was subject to military discipline, and if so, that he disobeyed orders. Nevertheless, the deed was heroic. The wounded officer, however, should realise that the doctor gave his life because "called by duty," the high conception of duty as realised by the medical profession. Why should the name of the fallen hero not be disclosed?

The Role of the Obstetrician.

WE flatter ourselves that we are not easily startled, but we must confess that for once our judicial calm has been disturbed by a communication from across the pond. We have always believed firmly in the obstetrical efficiency of nature. We have set ourselves to aid her efforts with as little interference as possible unless some untoward complication called for further action on our part. We have pinned our faith to the natural order of things and have sought to imitate them in our methods. And now comes this bolt from the blue in the form of a paper by Dr. Charles B. Reed, of Chicago, published in a recent number of *Surgery, Gynæcology and Obstetrics*. Our watchful waiting is an evasion of responsibilty, our masterly inactivity but a paraphrase of timidity, indolence, and dubiety. We are to impose our will upon each pregnant woman until the whole process of childbirth works in strict harmony with the principles of modern science. Having seen the woman, we must appoint the day upon which we shall consider the child to be mature. The day arrives and we induce labour—"The apple is plucked at maturity, why not the child?" We control the pains, the woman's consciousness, the advancement of labour, and as soon as possible with our forceps we extract the ripened fruit. The woman is saved the tiresome and uncertain wait for the day of her delivery, at the appointed time labour is shortened so that she may suffer no exhaustion, while the mythical dangers of interference—septic infection, irregular contractions, avoidable lacerations—may all be completely ignored. Reed quotes 100 cases treated in this manner. The fact contained in his opening sentence that "the physiological duration of human pregnancy is as yet known only approximately," has forced him to work upon an average, and he determines the maturity of the fœtus *in utero* by a

measurement of its length, the object being to avoid labour with a post-mature child, as he considers 70 per cent. of infants who weigh over 8 lb. at birth. Yet, as the weight of the infants in this series varied from 5 lb. to 10 lb., the average being 7.7 lb., the method does not appear to accomplish its object with very great accuracy. In 23 of these cases forceps were applied in accordance with his opinion that "the courageous use of forceps is safer for mother and child than a timid reliance on the aimless powers of nature." We admire Mr. Reed's courageous self-confidence, but we agree with the remark of the dear old lady who, having read a newspaper notice of a birth, with the words "by cable" appended, declared that she thought the old-fashioned way better.

Time in Surgery.

Under the auspices of a perfect asepsis, and with the collaboration of a specialised anæsthetist, the surgeon is sometimes inclined to forget that an operation may still be a trying experience for the patient, and that the adverse effect will be in direct proportion to the length of time required. Mr. R. P. Rowlands, of Guy's Hospital, has written a much-needed reminder of this fact, published in a recent number of the *British Medical Journal*. He pleads for a more complete preparation before the operation is begun, also for a simplification of all *technique*, that the progress of the work may be delayed as little as possible. Important as this is, there is another delay which is far more dangerous—that is, the delay in diagnosis and the decision to operate. Mr. Rowlands quotes in illustration two cases of acute appendicitis, the one diagnosed and operated upon within thirteen hours of the onset, whose convalescence ended in complete recovery three weeks later; the other case neither diagnosed nor operated upon until the tenth day, followed by many months of severe illness and misery. Of acute conditions, appendicitis and intestinal perforation are the best examples of the need of haste in operative interference. The removal of an acutely inflamed appendix within twelve hours of the first symptoms is no more risky than its removal during the quiescent period, while a few days later the complications of abscess, peritonitis, or perforation will increase the dangers manifold. Of chronic conditions, cancer is quoted as the standing example of the danger of delay. Were diagnosis generally improved, inoperable cases of cancer would not be met.

The Motor Tax.

We are far from continually advocating the rights of the medical profession as though it were to constitute a species of religious caste. Yet upon an occasion when their services are still in demand, and are in many instances increased, by partial attendance upon members of the military profession; when their expenses are advanced without their being able to put any premium upon their own labours; when time and life itself depend upon the rapidity of their movements; under such circumstances to rope them in with the general community in the matter above indicated is surely unfair. To compensate for increased taxation on commodities the merchant raises his prices. This is not possible for the professional classes. A sum of even eighteen pounds per annum is a serious matter for many struggling practitioners. If they decide to dispense with their conveyance, the lives of their patients and their own health and consequent efficiency are placed in jeopardy. The medical man does not employ a motor car for amusement. He employs it for *efficiency*—to reach his clients as quickly as possible—and if for any selfish reason at all, to prevent his own breakdown from physical exhaustion.

Supplies.

The state of dereliction in which the trade of medical and scientific appliances has been left by the war calls for some attempt at amelioration. Not only more elaborate pieces of apparatus, but even such a simple commodity as glass tubing can no longer be procured with any reasonable facility. At first we were told that such circumstances were due to the imperfect and hampered traffic and shipping. To-day it is because all workers in such material are engaged in manufacture for purely military purposes—if not actually recruited. We think that preferential treatment might well be shown to the medical man, and more especially to hospitals, many of which are largely occupied by invalided military. Their supplies of chemicals and stuffs, both for ward and laboratories, *should* be guaranteed. That they are not already so, nay more that they are not to be so, is not to be blinked at by the pretext crisis. It is inefficiency of public administration—simply that—nothing more nor less. Let them be circularised, and an approximate estimate arrived at, to be subsequently met as far as may be possible.

Septicæmic Diarrhœa in Measles.

Our Paris correspondent writes that Professor Marfan has recently drawn attention to this serious complication in measles. It is especially frequent in children under four or five years old, but may appear in older children, and even in adults. The diagnosis of septicæmia is established by elimination of the different causes capable of giving a rise of temperature (broncho-pneumonia, otitis, etc.) Septicæmic diarrhœa is nearly always catarrhal, although Trousseau has mentioned a dysenteriform variety in certain epidemics. The prognosis depends much more on the septicæmic state than on the intensity of the diarrhœa. He remarks that the higher the temperature the worse the general state of the patient and the more serious the septicæmia. He urges the importance of noting the state of the liver; if this is enlarged, the case will almost certainly end fatally. Treatment consists in a water diet for about six hours, then milk diet with rice-water. Tepid baths and inunctions with collargol.

PERSONAL.

Dr. J. H. Mains, of Clackmannan, has been appointed Certifying Surgeon under the Factory and Workshop Acts, in succession to Dr. W. Murray (resigned), for the district of Clackmannan.

Miss Rachel Mackenzie, M.B. (of Walthamstow) has been appointed part-time medical officer by the Tottenham Urban District Council. The Council also appointed three women health visitors.

The Royal Humane Society has decided to present a bronze medal to Dr. Alan M'Dougall, the medical superintendent of the epileptic colony at Warford, near Alderley Edge, for his heroic rescue in connection with the ice disaster in November, when eight persons were drowned.

At the General Quarterly Court of Governors of the Royal Hospitals of Bridewell and Bethlem, held on April 17th, the Lord Mayor, Colonel and Alderman Sir Charles Wakefield, was appointed President in the room of the late Sir Thomas Boor Crosby, M.D., and Lieutenant-Colonel A. J. Copeland was for the 28th year appointed Treasurer.

CLINICAL LECTURE

ON

EXTRA-UTERINE GESTATION.

By C. E. PURSLOW, M.D.Lond., M.R.C.P.Lond.,

Honorary Obstetric Officer, Queen's Hospital; Lecturer in Midwifery and Diseases of Women, University of Birmingham; Consulting Surgeon, Birmingham Lying-in Charity and Maternity Hospital.

EXTRA-UTERINE gestation is the implantation and growth of the ovum in some other place than the uterine cavity. Cases, however, of pregnancy in an ill-developed horn of a bi-cornuate uterus are attended by the same symptoms and dangers as true cases of extra-uterine gestation, and are generally included in descriptions of the latter; to cover these, the term "ectopic" may be used instead of "extra-uterine."

Extra-uterine gestation in an enormous preponderance of cases occurs in the Fallopian tube, and, at one time, the occurrence of primary abdominal and ovarian pregnancy was denied, but several undoubted cases of the latter have now been recorded, and lately one or two cases of primary abdominal pregnancy have been published by acknowledged authorities.

As regards the ætiology of tubal gestation there is still much dispute. At one time it was thought that the whole subject was settled by the statement that it was due to damage to the lining membrane or the lumen of the tube by previous inflammation; but, since then, several investigators have reported cases where the most careful examination has failed to disclose any evidence of previous lesion in the tube, and many now regard the condition as an accident, the ovum happening to stray into some blind diverticulum or to be caught in the folds of the mucous membrane. If there is only delay after fertilisation, it is easy to understand how the trophoblast of the ovum, which is undergoing rapid development, will be able to form an attachment to the wall of the tube.

Pregnancy is commonest in the ampulla of the tube, and we will take this as the type. When this occurs, the trophoblast of the ovum excavates the wall of the tube, and the ovum becomes embedded under the mucous membrane in the same way as is now proved to occur in normal uterine pregnancy.

The following occurrences may then take place:—

Pregnancy may go on to term in the tube. This is doubtful, though some writers consider that it has been proved.

The pregnancy may be disturbed at an early date by hæmorrhage into the tissues of the ovum, resulting in the death of the fœtus and leading to the formation of a tubal mole. This forms one of the varieties of hæmatosalpinx, and the blood may undergo complete absorption, or, very rarely, may become infected and suppurate, forming a pyosalpinx.

Tubal Abortion may occur. This may follow the formation of a tubal mole, or may occur as the primary lesion. In either case the fœtus dies. This occurrence is attended by hæmorrhage into the peritoneal cavity, resulting in the formation of a hæmatocele.

The tube may rupture. Several results may follow from this: A very large amount of blood may be effused into the peritoneal cavity, and the patient may die from loss of blood within a few hours. Fortunately, this result is uncommon.

In the majority of cases the patient survives the rupture, and then the fœtus may go on living. This is a rare occurrence, and will only be possible if the placenta or chorion remain attached to the wall of the tube, and if the amnion remains intact, though the latter proviso is denied by some authorities. The rupture may take place into the peritoneal cavity or through the part of the tube uncovered by peritoneum into the broad ligament. In either case the fœtus may live to term; in the first instance we should have a secondary abdominal pregnancy, and in the second an extra-peritoneal or broad-ligament pregnancy. The former is the commoner, though both are very rare conditions. If the fœtus goes on living to term, it may be extracted alive by operation; if that is not done it dies; it may then remain quiescent in the abdominal cavity for an unlimited number of years. In these cases it has become calcified, and is called a lithopædion; in other cases the sac may become infected, usually from neighbouring bowel; suppuration then occurs, and the fœtus may ultimately be discharged, piecemeal, through fistulous openings to the skin or neighbouring viscera. Both these occurrences are very rare.

A much more common event is for the fœtus to die at the time the tube ruptures, and for the effused blood to form a hæmotocele, which will be intra- or extra-peritoneal, according as to whether the rupture has been into the peritoneal cavity or into the broad ligament. In either case the effused blood may absorb, or, much more rarely, may suppurate.

The Symptoms of extra-uterine gestation are often atypical, and, in many cases, most puzzling. It should be borne in mind that when we speak of the symptoms of tubal gestation we usually mean the symptoms due to some of the disturbances of the pregnancy which have been mentioned above, as until one of these has occurred there is, as a rule, nothing to call attention to the case or to distinguish it from ordinary uterine pregnancy.

The three most constant symptoms of extra-uterine pregnancy in my experience are:—

(1) Irregular or constant slight uterine hæmorrhage.

(2) Intermittent attacks of severe abdominal pain.

(3) The presence of a tender mass on bimanual examination.

Amenorrhœa is usually spoken of as one of the leading symptoms, but in a large percentage of cases (some say 30 per cent.; I should say even more) it is absent, and many cases of tubal gestation are overlooked, owing to the medical man paying too much attention to the absence of the symptom.

Now with reference to the symptoms mentioned above.

The Hæmorrhage is due to separation of the decidua which has formed in the uterus, and has nothing to do, directly, with the hæmorrhage, which comes from the site of the ovum in the tube, although it seldom occurs unless one of the disturbances of pregnancy already mentioned is present; it is never great in amount, and is very persistent, often going on for two or three weeks, with very little intermission. The patient will frequently volunteer the statement that the blood is unusual in

colour, being generally darker than ordinary menstrual loss.

The occurrence of a persistent hæmorrhagic loss in a woman of child-bearing period, if accompanied by abdominal pain, should always raise the question of extra-uterine gestation. The pain varies much in severity, and is usually intermittent, though sometimes continuous pain is complained of. In its most characteristic form it is accompanied by faintness or actual syncope and, less commonly, by vomiting. A feature in many cases, and one which is somewhat characteristic, is pain in the rectum with desire to go to stool (rectal tenesmus).

The pelvic tumour varies greatly in character; it is due mainly to effused blood and, only slightly, to the actual gestation sac or its contents. It may be found behind or on either side of the uterus, and in some cases may form a distinct abdominal tumour reaching well up towards the umbilicus. It is a somewhat ill-defined swelling, and, as felt from the vagina, may vary in consistence at different parts, owing to the varying degrees of coagulation of the blood, and, in my experience, it is almost always very tender to the touch, sometimes excessively so. In some of the worst cases there is no definite tumour, the blood being effused so quickly that there has not been time for it to clot. In these cases there is marked shock, and pallor and air hunger are prominent symptoms.

Other symptoms which may be met with are:—

Retention of urine. This occurs in cases in which a large amount of blood is slowly effused into Douglas's pouch, forming a retro-uterine hæmatocele, but it is never so marked and persistent a symptom as in cases of retroflexion of the gravid uterus. We shall refer to this point again later.

Pyrexia may be present in cases in which a large amount of blood is undergoing absorption, and does not necessarily indicate infection of the infused blood.

Diagnosis.—In the acute cases in which intraperitoneal "flooding" occurs, the condition may simulate any acute abdominal catastrophe, such as ruptured gastric ulcer, fulminating appendicitis, twisting of the pedicle of a pedunculated tumour, etc.

In the more usual sub-acute cases there are two conditions from which a differential diagnosis is most important, as the treatment for these, if applied to a ruptured tubal gestation, would prove disastrous. These are:—

(1) Ordinary abortion of an intra-uterine ovum.

(2) Retroflexion of a gravid uterus.

I have seen cases of extra-uterine gestation in which one of the above has been diagnosed.

In the first case there are several points to be noted. The amount of vaginal hæmorrhage in extra-uterine gestation is never very great, and if the medical man is shown a large quantity of blood and clots he may feel sure that he is not dealing with a case of extra-uterine gestation.

The pain in uterine abortion is seldom so severe as in extra-uterine gestation, and is not attended by faintness. Finally, the diagnosis will depend mainly on a careful bimanual examination, made, if necessary, under an anæsthetic; this will reveal an extra-uterine mass in the latter case.

When an intra-uterine abortion is accompanied or followed by septic infection of the tubes, the differential diagnosis from extra-uterine gestation may be almost impossible.

In the second case of differential diagnosis from a retroflexed gravid uterus: in each there will be symptoms of pregnancy and a retro-uterine mass. In the retroflexion the pregnancy will probably have advanced farther than in the tubal gestation—viz., to the 14th week; in each case there may be retention of urine, but this is a much more constant and predominating symptom in the retroflexion than in the other. Finally, a bimanual examination must be made, and in these cases an anæsthetic is almost always required. This will enable us to determine the position of the body of the uterus—whether lying in front of the mass in Douglas's pouch, or incorporated with it.

The most difficult differential diagnosis, though by no means so important as those above mentioned, is from inflammatory affections of the Fallopian tube. Here the physical signs may be precisely similar, and unless the history helps, which it by no means always does, the differential diagnosis may be quite impossible; this is especially the case if intra-uterine pregnancy and abortion are associated with the salpingitis as mentioned above.

Other diseases simulating extra-uterine gestation are: a small ovarian cyst with twisted pedicle; appendicitis; acute intestinal obstruction, etc. In all these cases the differential diagnosis is not so important as in the first two mentioned, as active treatment by manipulations per vaginam is not likely to be attempted, and, if the symptoms are sufficiently severe, abdominal section will not be out of place in their treatment.

During the last few years I have seen some cases of plumbism, due to the taking of diachylon pills for the purpose of procuring abortion, in which the symptoms have borne a superficial resemblance to those of an extra-uterine gestation. In these cases there has been a short period of amenorrhœa, followed by some bleeding and by very severe abdominal pains; with these anæmia is frequently associated. The pulse, however, is not affected, there is no marked tenderness or rigidity of the abdomen on palpation; constipation is marked. On making a bimanual examination there is no tenderness, and no extra-uterine lump. An examination of the gums will show the typical blue line, but until one has had experience of these cases and is on the look-out for the latter sign, the true cause of the condition may easily be missed.

Treatment.—There can be little question that for almost all cases of extra-uterine gestation, under all the various circumstances we have mentioned, the treatment is *operation*. The only exception I would make is in a case of limited hæmatocele, where all signs of recent hæmorrhage have ceased, and the colour, pulse and general condition of the patient are good. In these we may try expectant treatment, and in some the clot may be completely absorbed and the patient may entirely recover; but, if this line of treatment is adopted, the patient must be under such circumstances that operative aid can be quickly obtained if signs of further bleeding set in; and increasing experience makes me less and less inclined to deal with cases on these lines.

A few questions relating to the operation remain to be considered.

As regards the route, I should unhesitatingly adopt the abdominal incision in all but a limited class of case—viz., where there is a well-marked retro-uterine hæmatocele, with symptoms suggesting septic infection of the effused blood; in these vaginal incision through the posterior fornix, with free drainage, is the operation indicated.

The question arises in cases of fulminating intraperitoneal hæmorrhage whether it is better to operate on a patient in an almost moribund condition, or to wait for her to rally, with the risk that she may die unrelieved. Opinions differ; on the whole, I am in favour of immediate operation. If waiting is decided on, or if some delay is inevitable, then a fairly tight abdominal binder, in my opinion, may be very valuable, as it tends to drive the blood from the splanchnic veins and so prevent syncope,

in addition to any effect it may possibly have in checking the hæmorrhage by increasing the intra-abdominal pressure.

I shall not enter on the discussion as to whether, in advanced abdominal pregnancy, with a living fœtus, it is wise to operate at term or to wait for the death of the fœtus, as these cases are very rare and, in any case, no immediate decision will be required.

ORIGINAL PAPERS.

SOME UNSOLVED AND DEBATABLE PROBLEMS IN TUBERCULOSIS.

By EDWARD O. OTIS, M.D.,
Boston.

"TUBERCULOSIS has for years past given us many problems to solve" (*a*), says a recent writer, and it is to some of these problems upon which there exist conflicting and perhaps erroneous opinions, or for which we have, as yet, found no satisfactory solution, that I wish now to call your attention.

First I would refer to the undue emphasis placed upon the detection of physical signs in the early diagnosis propaganda. The general practitioner has now for many years been lectured, in season and out of season, upon the supreme importance of the early diagnosis of tuberculosis, and he has been unmercifully berated for his dereliction in neglecting to do this—many times justly, and sometimes, I believe, unjustly. He has become so sensitive under the censure that in my experience I find him making a diagnosis of clinical tuberculosis, not infrequently, upon indefinite physical signs, without giving due weight to the more important evidence of clinical symptoms. It seems to him more direct and scientific to base the diagnosis upon the physical findings rather than upon a painstaking investigation of the history and general symptoms —or, at least, the former occupies the foreground while the latter is relegated to the second place. The distinction between clinical active tuberculosis and local infiltration without symptoms does not seem to be always clearly comprehended—not even, perhaps, by the tuberculosis dispensary physician himself, or even the teacher. The presence of certain physical signs, definite or indefinite, with no symptoms of bacterial toxæmia, are interpreted to mean active tuberculosis, and the patient exhibiting such signs is accordingly removed from his family and employment and consigned to a sanatorium, where there is at least some risk that he may receive a new and active infection, whereas the individual was in no way ill, and probably never would have developed any active clinical tuberculosis.

"If a patient feels perfectly fit and well," says Patterson, "and his breathing capacity only is impaired, we could hardly say that he is *ill* with consumption. What really matters to the patient are the products of the bacteria entering into the general circulation." Drs. Gelien and Hamman (*b*) have, it seems to me, very justly estimated the relation between the physical signs and symptoms in making the early diagnosis when they say that "the early diagnosis of pulmonary tuberculosis is more a matter of clinical experience and judgment than of unusual skill in eliciting slight abnormalities in pulmonary physical signs." "It seems to us," they continue, "that in attempting to improve the diagnostic acumen of the general practitioner towards pulmonary tuberculosis more emphasis should be laid upon the observation of symptoms than upon the pulmonary examination. To carry out the former is within the reach of all, while to do well the latter will be a goal unattained by most of them." Has not the tendency been to insist too strenuously upon the detection of physical signs, often slight and indefinite, to the neglect of a careful observation and interpretation of symptoms—thereby, on the one hand, causing unnecessary anxiety and the disturbance of social and business relations by instituting uncalled-for treatment; and, on the other hand, neglecting treatment because the physical examination was negative, although the symptoms of active tuberculosis were obvious?

Since writing the above a very suggestive article upon "The Responsibility for the Failure to Diagnose Tuberculosis in its Early Stages" has appeared in the Journal of the American Medical Association for April 18th, 1914, by Dr. Ralph S. Lavenson, which seems to confirm my contention that undue emphasis is placed upon the detection of physical signs in the early diagnosis of tuberculosis. Dr. Lavenson investigated fifty-four instances in which the diagnosis had been made by the general practitioner "only after from three months to as long as five years after the patient had first sought a physician presenting symptoms suggestive of, and undoubtedly referable to, a tuberculosis pulmonary infection." In 52.7 per cent. of the cases a physical examination *alone* was made, and depending upon the result *alone* of this physical examination the diagnosis was not made, although tuberculosis existed, as subsequent events proved.

Second: Marriage and tuberculosis.

Under what conditions, if any, shall a man or woman who is tuberculous (one or the other), or who has suffered from tuberculosis, marry and have children? To state the question in detail: Shall a man or a woman with arrested tuberculosis marry and have children, both as regards danger to themselves and a predisposition to tuberculosis in their offspring? Shall a man who is tuberculous, but whose disease is in a quiescent state, and who still maintains good resistance and retains his working ability, marry and have children, provided his wife is healthy? Shall a woman who has only evidence of anatomical tuberculosis with no symptoms marry and have children? Various and conflicting answers have been made to these questions. You are doubtless familiar with the oft-asserted solemn asseveration of a prominent phthiso-therapeutist that a tuberculous husband and wife should be taught "not to procreate a race predisposed to tuberculosis." It seems to me that this is too sweeping a statement without modifications. How do we know that the children will be predisposed to tuberculosis? The recently published experiment of Brooks (*a*) would appear to offer substantial proof to the contrary, reasoning from analogy. In this experiment tuberculous cows were bred to tuberculous bulls, and at birth the calves were immediately taken from their mothers and fed upon modified pasteurised milk. Of more than 200 calves thus born not one became tuberculous, and there was some evidence which seemed to indicate that animals thus born were rather more resistant to tuberculosis than animals born of non-tuberculous parents. Why should we not expect that children born under similar conditions and treated in the same way would show the same results?

Why should not a tuberculous husband, if his disease is quiescent and the balance between the infection and the resistance is evenly maintained, have children if his wife is healthy? And still more so if his disease is arrested? And yet I recall a

(*a*) *Transactions of the American Climatological Association*, Vol. 30. 1914.

(*b*) "The Subsequent History of One Thousand Patients who Received Tuberculin Tests." *Johns Hopkins Hospital Bulletin*, June, 1913, xxiv., No. 268.

(*a*) "An Experimental Study of Heredity in Bovine Tuberculosis." *Proc. Soc. Exper. Biol. and Med.*, 1914, xi., 50.

pathetic instance of the latter case when the wife, though healthy, refrained from bearing children for fear of the possible inherited predisposition on the side of the husband. Our American Anglo-Saxon race is so rapidly diminishing at the present time that one should be extremely cautious, it seems to me, in advising further race suicide—"the unpardonable sin for which there is no atonement," says Colonel Roosevelt—unless from very definite and clearly determined reasons. I would even go further and say that it were better to take some risks with so much to gain in the preservation of a valuable family. For example, some married people, I am sure, would be willing to shorten their own lives if by so doing they could continue their name and family. I do not suppose there is much difference of opinion as to sanctioning the marriage and child-bearing of a woman who has obtained and maintained an arrest of her disease for a number of years, or of opposing the marriage of a woman who is still actively tuberculous or who has only an apparent arrest. When the husband is actively tuberculous, but not in the advanced stage, and his wife is healthy, it seems to me it is a question for him alone to decide whether he should have children; and if the child is at once removed from the father I do not believe the predisposition bugaboo need cause anxiety.

Third: The question of rest and exercise.

After the acute symptoms have subsided—for everybody agrees that absolute rest should be maintained during the fever period—when and how much exercise, if any, should be advised? Here opinions and practice vary somewhat. Dettweiler and Pratt seem to have proved pretty conclusively that continued rest during the whole period of treatment produces excellent results. Can we show better results and fewer relapses from exercise, however carefully graduated and supervised? Again, is there any definite proof that so-called "breathing gymnastics" are, at least, of any material benefit in the "cure," and is there not an element of danger in their employment? E. Kuhn, of Berlin, has recently published a long and elaborate argument in favour of breathing exercise by means of his "Lungensaugmaske," and adduces much theoretical and experimental evidence of its value. He considers that auto-inoculation is produced not by general bodily exercise, as held by Wright and Paterson, but by the increased lung movement induced by the "Korperbewegung," and hence his conclusion is that breathing gymnastics is the essential element in the production of auto-inoculation. On the other hand, we are familiar with the not infrequent brilliant results attained by the complete immobilisation of the lung through artificial pneumothorax, and in laryngeal tuberculosis from long-continued absolute rest. It is fair, however, to state that Kuhn also advises artificial pneumothorax even in cases not far advanced or with cavities. Where mobilisation of the lung cannot be practised without rise of temperature, Paterson's method of graduated exercise has become very popular and been widely adopted; not always, however, with the same discrimination that he exercised. One must bear in mind that Paterson's cases were in the first place carefully selected for him at the Brompton Hospital before being sent to Frimley; and, further, that either Paterson himself or a trained superintendent constantly supervised the work. "Uncontrolled doses" (of exercise), says Paterson, "are in the last degree dangerous." "Treatment by means of exercise," he continues, "is not of universal application; it can only be used in the case of a patient who fulfils two rather onerous conditions. In the first place he must be afebrile and quite free from all constitutional symptoms; and, secondly, he must have attained the position of an ordinary person in the house, by being able to remain up all day fully dressed, and to walk up and down stairs." Upon how definite a scientific basis Paterson's theory of auto-inoculation stands seems still to be somewhat uncertain. At all events it is well to remember that continued rest has produced, and does produce, excellent results, and exercise at any stage of the game has its dangers, particularly when lacking the Paterson skill in application and supervision. I recognise, however, that there are psychic conditions in the course of the treatment which may warrant a recourse to exercise even if some risk is incurred.

Fourth: Have we been over-doing, or applying without proper discrimination, the open-air exposure in the treatment of tuberculosis?

It would seem to be rank heresy even to suggest such a thing; but do we always sufficiently individualise our patients in the application of extreme open-air methods? I refer more particularly to the more northern latitudes. Take, in the first place, the far-advanced incurable cases, for even they have, not infrequently, been subjected to this treatment. What is gained by doing this and rendering their last days more wretched, when a warm ward or room—well ventilated, of course—would render their existence more comfortable? "I have seen a good many of them," said a patient in our Municipal Consumptive Hospital, to me not long ago, "put out of doors, but they all go below (to the dead house) just the same."

With regard to the earlier, so-called "curable" cases, not all, it seems to me, are suitable for the rigorous out-door system in our northern climate. Some never become accustomed to the life, and suffer genuine distress under the constant exposure to the cold, and it is, at least, a debatable question whether the excessive demands made upon the heat-producing forces of the body do not lower the resistance more than the open-air exposure raises it. They are like old people in their sluggishness of purpose. Is it not conceivable that with some individuals we would produce better results by less strenuous insistence upon out-door exposure, provided, of course, we furnish pure air in well-ventilated wards or rooms?

Or again: Are all patients equally adapted to the open-air treatment in our cold northern latitudes? Would not some do better in warmer climates, where the heat demands upon the organism are less, and where the out-door life could be enjoyed, not endured? A considerable number of persons, as we know, have a real antipathy to cold. Winter weather is to them a time of discomfort, if not of suffering. They dread cold as others do heat. They never can grow so accustomed to cold exposure as to render it anything more than a very uncomfortable experience. Even if their heat-producing centres did more or less adequately finally respond to the demands made upon them by the cold, the process would be long and painful. If, after trial, this was found to be the case, could we not obtain quicker and better results, or, at least, equally good results, under more agreeable conditions if we sent our patients, with this idiosyncrasy as regards cold, to a warmer climate for the open-air treatment, when a choice of climates was permissible from other considerations—to such a climate, for example, as that of New Mexico, Southern California, or the Pine Belt of the South? We say that "tuberculosis can be cured in any climate," and then in the same breath we say, "but a cold climate is more favourable." But is it so for every case?

Fifth, and finally: The problem of prevention in the case of a person suffering from more or less advanced tuberculosis, but who maintains indefinitely an equilibrium between his infection and his resistance, and who, in consequence, is able to

be active in the community and perform his business and social duties. He maintains his normal weight, and, for the most part, his strength; but he is constantly emitting tubercle bacilli. From business or social considerations he naturally desires to conceal his condition, and hence does not exercise all the precautions which he knows, and which we prescribe for an actively tuberculous individual. If of the well-to-do class he goes into society, he dines out, he is brought into intimate association with many people in professional or business relations. Or if of the working class, he lives with his family and is intimately associated with his fellow working men in shop or factory; he, too, that he may hold his job, desires to conceal his condition. I have in mind the case of a professional man in the higher ranks of society, who looks well, and is able to attend to his duties. From his love of music and acquaintance with musicians he goes more or less into society. He is suffering, however, from advanced tuberculosis, and his sputum always contains tubercle bacilli. Such cases must be a menace to those with whom they are brought into intimate association. They will probably never obtain an arrest, and feeling well as they do, or from other prohibitive circumstances, will not take the "cure," or have tried and abandoned it. What are we to do with them from the standpoint of prevention? We cannot compel isolation, and if it were possible, somebody would, in many cases, have to provide indefinitely for the support of the family. So long, however, as they remain in active life they desire to conceal their condition, and hence cannot, or do not, take all the necessary precautions to render themselves innocuous to others. This is one of the many problems in the prevention of tuberculosis which we have not as yet solved.

MEDICAL SCIENCE IN SHAKESPEARE'S TIME.

By A. H. MILLAR, LL.D., F.R.S.A.
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NEARLY a quarter of a century ago—in 1892—there appeared in the columns of the *Medical Press and Circular* a very remarkable paper by John Knott, entitled "The Medical Knowledge of Shakespeare." Four years before that date (1888) Dr. Knott had contributed to the *Lancet* a leading article upon the same subject, and at that time so little was known as to the labours of other workers in the same field, that these papers were regarded as a new revelation. Nothing could be further from the purpose of the writer, for he knew that many years before his time the subject had received attention from English, American, French, and German writers. But these articles had the effect of directing attention towards a most fascinating subject, which had been suffering from temporary eclipse, but is now attracting much attention alike in the world of medicine and of literature. It would be a very pleasant task indeed to the present writer to quote numerous passages from Shakespeare's works, indicating the poet's knowledge of past medicine and premonitions of modern medical ideas; but that would require a very extensive volume. It may better serve a good purpose to indicate, however briefly, a field of research that will be attractive alike to students of literature and of medicine.

The first English writer who dealt, even in a superficial fashion, with the subject, was George Farrar, who published in 1826 a somewhat formal volume under the title:—"Observations on . . . Rates or Laws of Mortality . . . Illustrations of the progress of Mania, Melancholia, Craziness and Demonomania, as displayed in Shakespeare's characters of Lear, Hamlet, Ophelia, and Edgar, etc." The very clumsiness of the title indicates the ponderosity of the work; yet it served to direct attention to an aspect of the work of "myriad-minded Shakespeare," which had theretofore been neglected. It is very likely that this work came under the notice of the late Sir John Charles Bucknill (1817–1897) when he became Medical Superintendent of Devon County Asylum in 1841, and thus induced him to follow the studies which resulted in his notable volume "The Psychology of Shakespeare" (1859), and his book "The Medical Knowledge of Shakespeare," issued in the following year. These works may be taken as the beginning of a scientific study of Shakespeare's medical knowledge, and they have produced a prolific crop of imitators and original investigators.

The Germans, ever devoted admirers of Shakespeare, were the first to follow up the idea. In 1865, Dr. G. Cless published at Stuttgart, a volume entitled *Medicinische Blumenlese aus Shakespeare*; which produced a volume upon a kindred topic in the same year, by Dr. C. W. Stearns of New York, under the title of "Shakespeare's Medical Knowledge." The most prolific American student of Shakespeare in the department of Medicine was Dr. A. O. Kellogg, of New York, who published his volume on "Shakespeare's Delineations of Insanity, Imbecility, and Suicide," in 1866; and contributed several remarkable articles on cognate subjects to the *American Journal of Insanity* between 1860 and 1872. The German writers who succeeded Cless were as follows:—H. R. Aubert, "Shakespeare als Mediciner," Rostock, 1873; Sigismund, "Die Medizinishe Kenntniss Shakespeares," Weimar, 1881–82; and Hirschfeld, "König Lear," Danzig, 1882.

France has contributed several important works on this subject. The earliest of these were the elaborate articles by A. J. F. Brierre de Boismont, entitled "Etudes psychologiques; Shakespeare, ses connaissances en alienation mentale," published in the *Annales Medico-psychologiques* of Paris, in 1868–69. To the "Revue de Deux Mondes" for 1876, E. Onimus contributed a notable paper on "La Psychologie Médicale dans les Dramas de Shakespeare." Other French writers on the subject are A. Foville, "Les Médecins dans les Drames de Shakespeare," Paris, 1885; and Biante, "Etude médico-psychologique sur Shakespeare et ses œuvres," Toulouse, 1889.

Besides the American writers already mentioned the following are especially worthy of notice:—H. R. Bigelow, "Hamlet's Insanity," *Chicago Med. Journal*, 1873; J. Rorke, "Medical Quotations of Shakespeare," *West. Lancet*, San Francisco, 1879–80; J. P. Chesney, "Shakespeare as a Physician," St. Louis, 1884; B. R. Field, "Medical Thoughts of Shakespeare," Easton, Pa., 1884; T. J. Turner, "The Signs of Approaching Death illustrated from Shakespeare," Philadelphia, 1884; R. N. Hawley, "The Medical Lore of Shakespeare," *Med. Age*, Detroit, 1892; and O. W. Owen, "The Medicine in Shakespeare," *Physician and Surgeon*, Detroit, 1893. These names are sufficient to show that the subject has received adequate attention in the great centres of the world's civilisation.

To this country, however, naturally belongs the

honour of having directed attention to this most fascinating topic, interesting alike from a literary and a medical point of view. Hamlet has always been a favourite study with psychologists, and numerous volumes and articles have been written upon this topic, the most notable being "Hamlet, from a Psychological point of View," by W. B. Wood (London, 1870), and several contributions by Dr. Brinsley Nicholson to the Transactions of the New Shakespeare Society, from 1879 till 1882, the work of a profound student of Shakespeare. Other writers who have written articles (chiefly to the *Journal of Psychological Medicine* and the *Lancet*) are R. H. Semple; F. L. S. Winslow; J. F. West; W. Wadd; L. K. H. Hackman; Sir B. W. Richardson; and John Moyes. The last-named, Dr. John Moyes (Glasgow Univ. 1886), chose as the thesis for his degree, "Medicine and its kindred Arts in the Plays of Shakespeare"; and afterwards elaborated the subject to form a most interesting volume, which was published posthumously in 1896 at Glasgow.

Hitherto the bibliography of the subject only has been mentioned, yet that is sufficient to show that an extensive literature is now available; and these notes may be useful for future investigators. Rightly to apprehend Shakespeare's relation to the medical science of his time it is needful to consider the pathological theories that were prevalent in this country during the poet's lifetime. It was a transition period. Galen, Hippocrates, and Paracelsus had still numerous and combative followers, though their dates were widely separated. This can be proved from Shakespeare's own writings: ("All's Well that ends Well," II. 3; "Merry Wives of Windsor," II. 3; III. 1; "II. Henry IV.," I. 2; "Coriolanus" II. 1). Dr. Moyes describes the time in the following striking passage:—

"Vesalius, the great anatomist, died about a year before Shakespeare's birth; Harvey announced his discovery about ten years after Shakespeare's death. In that interval great advances were made in all branches of knowledge associated with medicine. In anatomy and physiology a few names will suffice to mark the period. Fallopius was but recently dead; Eustachius still lived; Fabricius, who discovered the valves of the veins, was teaching in Padua; Serventus entombed in a theological work a description of the pulmonary circulation; Col umbus of Rome explained the relation of the pulse to the systole and diastole of the heart; and Caesalpini stood on the brink of anticipating Harvey's discovery."

While there was all this movement in the medical world of Europe, England was plunged in the depths of empiricism. By an Act of Parliament, date 1542, liberty was given to the following persons to practise medicine and surgery:—"Every person being the King's subject, having knowledge and experience of the nature of herbs, roots, and waters, or of the operation of the same, by speculation or practice, within any part of the realm of England." Shakespeare frequently ridicules this absurdity, witness his description of the Apothecary in "Romeo and Juliet" (V. 1) and of the doctor in the "Comedy or Errors" (V. 1). Dr. Caius (1510–1573) thus describes the practitioners of his day:—"Simple women, carpenters, pewterers, braziers, soap-ball sellers, apothecaries, avaunters themselves to come from Pole, Constantinople, etc." Still more severe was Dr. Cotta, in his "Short Discovery of the unobserved dangers of ignorant and inconsiderate Practisers of Physicke in England," published in 1612. Here is one passage:—"It is a world to see what swarms abound in this kind, not only of tailors, shoemakers, weavers, midwives, cooks, and priests, but witches, conjurors, jugglers, and fortune-tellers." Verily, the practice of medicine was in a parlous condition in Shakespeare's time, as described by himself and his contemporaries.

It would be impossible in limited space to give quotations from the dramas to show how thoroughly Shakespeare was acquainted with the current theories as to diagnosis and treatment in his time; but it will be both instructive and startling for any medical student to examine Shakespeare's work to discover his knowledge of recondite subjects. But as examples of his use of the theory of Hippocrates that the liver was the great organ of blood-making and the generation of heat, take these:—

"Twelfth Night," III. 2.

Sir Toby Belch: . . For Andrew, if he were opened, and you find so much blood in his liver as will clog the foot of a flea, I'll eat the rest of the anatomy.

"Merchant of Venice," III. 2.

Bassanio: . . How many cowards, whose hearts are all as false
As stairs of sand, wear yet upon their chins
The beards of Hercules, and frowning Mars
Who, inward searched, have livers white as milk.

The term "lily-livered," appears in "Macbeth," V. 3 and "King Lear" II. 2, and the idea is frequently used "II. Henry IV," "Troilus and Cressida," "Antony and Cleopatra," "The Merchant of Venice," and the "Tempest."

The diseases which are, in a passing fashion, referred to by Shakespeare are these:—Ague, Fever, Leprosy, Measles, Plague and Pestilence, Rheumatism, and the Sweat. Less frequent mention is made of Apoplexy, Boneache, Colic, Consumption, Convulsions, Cramp, Dropsy, Ecstasy, Epilepsy, Gout, Green Sickness, Heartburn, Hemiplegia, Hydrophobia, Itch, Jaundice, Palsy, Sciatica, Sea-Sickness, Somnambulism, Tetter, and Visual Spectra. Passages bearing upon all these diseases could be quoted; and the remarkable fact is that Shakespeare handles them all as though he were familiar with every vagary of the sick bed. Then again, his knowledge of Therapeutics is almost weird and supra-normal, foreshadowing methods of treatment which have only recently been discovered. No doubt many of his prognostications were so vague that they could not be founded upon either carefully studied theory or practice, yet they are not the less astounding.

The student who intelligently follows out the course of Shakespearean study here outlined, will be compelled to conclude that Shakespeare was one of the cleverest physicians, most accomplished surgeons, and most learned among the toxicologists of his time, if internal evidence be of any value. But then Shakespeare has been similarly proved to be a lawyer, a theologian, a profound philosopher, a Court gallant, and an humble sailorman! Verily, there was a whole encyclopædia of wit and wisdom contained in that colossal brain, that sympathetic heart, and that marvellous

intellect which were combined to make up that wonder of all time, whom we call Shakespeare.

THE EMPLOYMENT OF FEMALE NURSES IN THE MALE WARDS OF MENTAL HOSPITALS IN SCOTLAND.*

By GEORGE M. ROBERTSON, M.D., F.R.C.P.EDIN.

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TEN years ago I was requested by the Secretary of the Medico-Psychological Association to open a discussion at the Annual Meeting of the Association on this subect. It was then regarded by some asylum medical officers as "the topic of the hour," largely because of certain views on administration which I had expressed and certain innovations in methods I had made at the Stirling District Asylum.

This method of caring for the insane has again come into prominence on account of the somewhat alarming position that has been created by the shortage of male attendants in asylums. No class of the community has done its duty by voluntary enlistment for the war more loyally, and the difficulties caused by the departure of attendants, and the impossibility of getting suitable men to replace them, have been relieved in many asylums by the introduction, for the first time, of female nurses on the male side. In many other institutions the advisability of taking this departure from established routine is being seriously considered. Great interest has, therefore, revived in this method of care and nursing, and I have had the unusual distinction conferred upon me of being asked for the second time by the secretary of the Association to open a discussion on it. This is now a much easier task for me than it was ten years ago, for during the interval the principles and practices then advocated have been very widely adopted in Scotland. It is not too much to say that they now form a characteristic and firmly established feature of the modern Scottish system for the care of the insane.

Many of us have now grown so accustomed to female nursing, and value it so highly, that, on contemplating the subject, the question that comes most readily to our minds is—Why were women not always employed? To others who only know the mental hospital as it now is, with its carefully designed accommodation and its comfort, its good order and discipline, its skilful and intelligent nursing staff, its prevailing atmosphere of consideration for the patients and their medical care, the question also seems a very obvious one. But the mental hospitals of to-day are not less remote from the madhouses of 125 years ago than the period we live in from the bronze age, though we inherit many archaic traditions and practices from them. The madhouses at the end of the eighteenth and the beginning of the nineteenth century were not hospitals; they were prisons for the safe custody of a dangerous class. Little wonder, then, that the methods they adopted were those of the prison, that "keepers" alone were employed on the male side and that women were rigidly excluded from it. The modern mental hospital can justly claim to be classed with other medical institutions, but if so it should fall into line with them by discarding an anachronism and by making use of women's mothering instincts and natural gifts for the nursing and care of male patients as other hospitals have done. There rests, it seems to me, a heavy responsibility upon those who now fail to do so.

* Read in London on February 17th, 1916, at the General Meeting of the Medico-Psychological Association.

(1) AUXILIARY FEMALE CARE.

The story of the introduction of women's help on the male side of asylums forms an instructive chapter in the history of the care of the insane, but it is only possible here to refer to the most important landmarks. Judging by the inertia to their employment that still exists in many quarters, although in a neighbouring country its success is an established fact, the man who first employed women in this way must have been of a very independent and original spirit. He was no less a person than Dr. Samuel Hitch, the founder of the Medico-Psychological Association. He introduced this system into the Gloucester General Lunatic Asylum in the very same year that he founded the Medico-Psychological Association, namely, 1841, and could he have survived till to-day to see the development attained by the twin offspring of his mind, he would have much reason to be proud of both of them. Dr. Hitch employed the wives of his married charge attendants to help their husbands in the male wards, and I was informed by his widow that it was because of the harsh manner in which the male patients were then treated by the attendants that he was induced to take this step. This statement is confirmed by the minutes of the asylum, which I was permitted to see, in which it is recorded that this woman's husband had charge of the refractory ward. Dr. Hitch's lead was followed by many English asylums during the next forty years.

Another step in advance was taken in 1883 by Dr. R. M. Bucke, of the London Asylum, in Canada, who employed widows of good character in the male wards. Dr. Bucke was one of the most striking personalities of the American Medico-Psychological Association, and this experiment in his hands was a complete success.

A third step was taken by Sir Thomas Clouston, who had adopted Dr. Hitch's system by placing a married couple in charge of the Male Hospital at Morningside. The husband then died, and in 1890 the widow was appointed in full charge, with the male attendants under her authority. She was permitted to engage the services of two ordinary asylum nurses to assist her, and occasionally female patients would help as well.

These three methods for the employment of women on the male side, namely, Dr. Hitch's, Dr. Bucke's, and Dr. Clouston's, illustrate what I regard as the phase of *Auxiliary Female Care*. Its defect lies in the fact that the nurses were few in number and only assisted the male attendants, and the bulk of the nursing, even in those wards in which they were employed, continued to be done by the male attendants. It would appear that no danger was apprehended to these women from the violence of the patients, but the selection of wives or widows of good character indicates that the risk of misconduct was recognised and thus guarded against.

(2) ENTIRE FEMALE NURSING.

The first step towards the system by which a group of male patients is entirely nursed by women was taken by Dr. Turnbull in the Fife and Kinross Asylum in 1896. He placed a ward containing thirty male hospital patients, by day only, entirely under the charge of female nurses. Owing to the construction of the hospital very efficient supervision was capable of being exercised over these nurses by the matron and the charge nurse of the Female Hospital. The proximity to the other male wards also enabled male help to be immediately summoned if necessary. The Scottish Commissioners in Lunacy at once realised that Dr. Turnbull's innovation constituted an important new departure and a great advance on anything that had been attempted before. Acting on the advice of Sir John Sibbald, who

thought very highly of it, a similar arrangement was soon after introduced into the Glasgow (Gartloch), Lanark and Perth District Asylums. In the year 1900, at the Stirling District Asylum, I placed a group of male patients, by night as well as by day, under the charge of female nurses, thus for the first time frankly handing over the entire care and nursing of insane male patients to women alone during the whole 24 hours.

These arrangements just described may very appropriately be called the Scottish system of Entire Female Nursing, for its special features were not only developed in the Scottish asylums, but it has been very extensively adopted by them for nearly a generation. It is a totally different thing in practice from the system I have called that of Auxiliary Female Care, in which a few women assisted the male attendants. All who have had great experience of women nurses in male wards agree in saying that they are infinitely more useful if placed in sole charge of a group, and they much prefer it themselves. The patients benefit more certainly from their ministrations, for it provides a guarantee that they must be nursed by women. Under the system of Auxiliary Female Care there is a division of labour in the ward and the nursing may be done by the men and the cleaning up and household duties by the women. The danger of misconduct, which has been already referred to, decreases as the number of nurses employed becomes greater, and is least when the care of a whole ward is handed over entirely to women. It must be remembered, too, that supervision and discipline in the asylums of the Early and Mid-Victorian period, when the system of Auxiliary Female Care was employed, were not so perfect then as they are now. What with the advent of efficient supervision and of the good class of men and women now engaged in asylum work, difficulties of this nature can be overcome and need not be feared in a modern asylum.

(3) The Hospitalisation of the Asylum.

The employment of female nurses on the male side has not stopped at this stage of evolution in Scotland. Their introduction was in very large part due to the desire to make use in asylums of the very high standard of skill in nursing possessed by those who had been trained in our general hospitals. Three-quarters of a century ago, in Dr. Hitch's time, "Sarah Gamp" was in the flesh ("Martin Chuzzlewit," 1843), and there cannot have been much inducement to employ her, or others like her, on the male side for the sake of their skill in nursing. Dr. Hitch's first female nurse attended to refractory patients! If this highly skilled form of nursing be desired, then women must be employed, for unfortunately men do not receive this training in our general hospitals. Large numbers of trained hospital nurses have thus been appointed during the last twelve years to the Scottish asylums in important positions for the sake of their technical skill and training. Dr. Campbell Clark was the first to appoint a trained hospital nurse (Miss Mary Macfarlane) to the post of matron, at the Kirklands Asylum, Bothwell, in 1880. In the following year he commenced the systematic teaching and training of his asylum nurses and attendants, as was the practice in general hospitals. The idea took root, and in 1885 the Scottish Division published the Handbook for Attendants on the Insane, the most enterprising action ever taken by a division of the Association. This handbook, as is well known, has since been adopted by the Medico-Psychological Association, and has led to the granting of the certificate for proficiency in mental nursing and to the registration of certificated mental nurses. The first hospital nurse to work within the wards among insane patients and asylum nurses was appointed by me at the Perth District Asylum in 1896. This was an important step, not only on account of its direct influence on ward work, but because it created a supply of hospital nurses who were specially trained for the duties of asylum matronship, which had not previously existed. The demand for these became so great that over three dozen of my own nurses have received such appointments in other institutions. As all hospital nurses are accustomed to attend to male patients in the general hospitals, they think it the most natural thing in the world to continue to take charge of male patients in asylums. They have gradually extended the sphere of their usefulness far beyond the limits of the hospital wards on the male side to which they were first appointed and have invaded other departments. They have introduced innumerable reforms, which have approximated the methods employed in the asylums to those in the hospitals, and amongst these the greater employment of women in the male wards is only one. The trend of events in Scotland has been such that this employment of female nurses in the male wards, when seen in its proper perspective, is found to be only a part of a much greater scheme or ideal that has flowed like a tide over the land, that of the Hospitalisation of the Asylum. It is fifteen years now since this ideal was organised into a working system at the Stirling District Asylum, and a paper describing the methods employed there, entitled "Hospital Ideals in the Care of the Insane," was published by me in the "Journal of Mental Science" in the year 1902. The details of this system go, however, beyond the scope of the present paper, and include the building of asylum hospitals, the bed treatment of the insane, the study of the physical aspects of mental disease, etc.

Time is not only a great healer, but a great judge, who decides most appeals by very convincing logic, and fifteen years is a liberal period in which to test the merits of a system of asylum management. It was said thirteen years ago by a distinguished member of our specialty that the "nursing of male insane patients by females" was "preposterous," and that to run everything in asylums on hospital lines was "a great fad." It must be hinted in palliation that this authority had not had any experience of the methods which he criticised so freely. This method of nursing is now as distinctive and as firmly established a feature of the Scottish system of care for the insane as the well-known boarding-out system. It is employed in some measure or other in all but two of the important asylums of the country, and in these the superintendents have so far failed to introduce it, not because they are opposed to it on principle, but on account of structural difficulties with regard to supervision, housing, etc. This wonderful unanimity of opinion and practice amongst Scotsmen, whose national proclivities do not tend to concord, is remarkable testimony in its favour, and points to the manifest practicability and overwhelming merits of the system. The hospitalisation of the asylum is still on the whole an ideal to be aspired to, but it too is steadily developing and gaining ground year after year. It will perhaps come as a surprise to many to know that in a fourth of the asylums in Scotland, and among them are included some of the large ones, the matron is head of the nursing staff on the male side as well as on the female. How many hospital nurses are employed as sisters or assistant matrons it is impossible to say, but it must be large, for twenty-two were lately doing duty in the military hospitals. A system such as this which has survived the test of fifteen years' experience with enhanced reputation and has become national in scope must now have some other

qualification than "preposterous," some other appellation than "a fad," applied to it by all fair-minded and reasonable men and women. The man who sees no good in it, who thinks its adoption impossible, must believe that the Scottish Board of Control and the majority of the medical superintendents in that country, in other respects with the reputation of being shrewd and level-headed, are labouring under an obsession!

Having briefly described the history of the introduction of female nursing in the male wards of asylums, I shall now refer to certain objections and difficulties.

In the first place, it is said that this work is not a suitable form of employment for women. In reply to this it may be pointed out that the work in question is actually being done by women in all but two of the Scottish asylums, and the consensus of opinion in Scotland, where experience of the system is unsurpassed, not only does not support but contradicts the objection. The personal offices that all nurses, including hospital nurses, may be called upon to perform in the nursing of adult males may be objected to, and have been objected to. Between fifty and sixty years ago, before the movement started by Florence Nightingale had been given time to effect a reformation, I have been informed by my teachers that no woman with any self-respect or regard for her reputation nursed adult males in our general hospitals. Women from every rank of society are prepared to do so now, and are held in the highest esteem if they do. Is it not, then, clear that it is not the work alone that matters, but that the spirit in which it is done, the methods that are employed and the character of the person who comes to the work, are essential elements in any judgment upon it? If, therefore, the status of hospital nursing can be so transformed in the estimation in which it is held, may not a similar change by the adoption of similar methods take place in connection with asylum nursing? If approached in the proper spirit, if performed by approved methods, and if undertaken by the right persons, this form of employment has been found in Scotland quite suitable for women.

In introducing female nurses into the male wards for the first time, the most reliable women on the staff would naturally be selected by anyone who wished the experiment to be a success. They should be experienced, and they should not be young. The working unit should not be less than four in number. It is a great advantage to place a hospital nurse with asylum experience in charge of them. The methods employed in handling the patients and in the management of the ward should be those which have been adopted in general hospitals, on account of their regard for the decencies. It is naturally found that these can be most readily adopted for those patients who are confined to bed. When the patients are dressed and going about it is advisable to employ auxiliary male care in the form of one or two trustworthy married attendants to bathe the patients and to assist in other ways if required. I have never had the least difficulty in arranging for this small amount of auxiliary male care, and I have always found convalescent and working male patients willing to help the nurses.

In the second place it has been said that the male side of an asylum is not a fit place for a woman to be in. The presence of good women always has a refining influence on male society, and whatever the conduct of male patients, in speech and in general behaviour, may be, the advent of female nurses among them, if managed with care, will effect a change for the better. The capacity of the insane for education in good habits, while not illimitable, is very extensive, and in practice it is never exhausted in our large institutions. Were we not so familiar with it, their good behaviour and self-control, for example, during divine service, would astonish us every week as it does those who see it for the first time. If, therefore, it can be alleged of any asylum that its male wards are not a suitable place for women, then the sooner a reformation be effected the better for the patients there, for it is not a condition that need continue indefinitely.

It is then asked, are women who object to nurse male patients to be compelled to do this work? The answer is, of course not. There are women who object to nurse male patients, just as there are women who object to be nurses at all; but of the hundreds who have been nurses in the asylums of which I had charge, those who have objected during twenty years can be counted on the fingers of one hand. As a matter of fact, the vast majority prefer to do so, and the reason is not difficult to find. Male patients are always less troublesome and excitable than female, and women find that they receive more courtesy and readier obedience from men than from members of their own sex. They do not require to receive any extra salary to do this work once it has been started, for the women are engaged, as they are in general hospitals, simply to nurse; and it is all in the day's work whether they nurse patients of the male sex or of the female. It is very doubtful if there be any saving in expenses by the employment of women instead of men, because owing to the higher standard of hospital care aspired to, there is usually found to be a larger number of nurses required. In Scotland, any saving there may have been from this source has been more than expended on an increased night staff, which is proportionally much larger than that employed in English asylums and on hospital nurses for purposes of supervision, which is a practice that has now been largely adopted.

Lastly, it has been pointed out that many male patients, owing to their sexual proclivities, cannot be cared for by women. This is undoubtedly true, but the remedy is a simple one. Do not place them under women; let them be cared for by men. It is unthinkable that any experienced administrator would allow a simple difficulty of this kind, with an obvious remedy, to deter him from the introduction of women nurses. It may give him a little more trouble, which at present he escapes, but that is no excuse for avoiding a duty. Every day of the year, in every asylum in the country, a much more difficult and responsible task of an analogous nature is faithfully performed, that of distinguishing the patients who are suicidal from those who are not, and of making special arrangements for their care. To pick out patients whom it is undesirable to place under the care of women is, compared with this, an exceedingly simple matter.

Far from the employment of female nurses in the male wards of asylums being unsuitable in form, out of place, and objectionable to them, in the high state of organisation and development now attained by mental hospitals, whatever may have been the case in the past, it is most appropriate and a beneficent duty to the insane male patients under our care. They appear to be the last class of the helpless to benefit from the superior aptitude and skill that women show for the duties of nursing, and this privilege should no longer be denied them, as it is overdue. The reason for this superiority of female nursing rests on a solid foundation, the mothering instinct in women. It is an instinct so strong that in many cases it cannot be suppressed and must manifest itself in one form or another. There are, of course, exceptional women and exceptional men, and we have all met male attendants who have been kind

and devoted nurses. Nevertheless, nursing the sick, the infirm and the helpless, be they sane or insane, is pre-eminently woman's avocation. Sir Thomas Clouston summed up the situation tersely when he said that all his nurses longed to work in the hospital, whereas all his male attendants wished to be kept out of it, and preferred to do outdoor work, and that he never saw a man enjoy sick-nursing in the same way as many women do.

It has been remarked that only a small proportion of the male patients are in the hospital wards, but is not a great part of the work in an asylum indoor domestic duties which in a private house are also performed by women? The cleaning and decoration of the wards, the bed-making, the laundry, and repair of the clothing, the serving of the food and the social functions are all tasks which in private life usually fall to the lot of women. Can it then be doubted that they are as efficient, if not more so than men, to perform these familiar occupations in asylums.

Moreover, it must not be assumed that female nurses are only of use for the care of the sick and helpless in an asylum. One of the surprises of the system in practice has been the discovery that they can usually exercise more control over cases of mania than male attendants, and the great advantage of their management lies in this fact that it is based on persuasion, and not at all on the show of force or on compulsion. Excited patients who are ready to fight any man who comes near them will often do anything they are told by a nurse, and they will become calm if they receive a word of sympathy from her. A woman has much the same influence over an insane man, who is not actually delirious, as she has over one who is supposed to be in his sound mind, and it is absurd to assume that all feelings of chivalry and honour die in a man because he suffers from some derangement of the mind.

The proportion of women it is desirable to employ on the male side of an asylum is, according to the Scottish Board of Control, at least 25 per cent. of the total day staff on the male side and 15 per cent. of the night staff. These figures are considerably exceeded in several asylums, among which may be mentioned the Stirling District Asylum. It may be taken as a typical county asylum in the accommodation it provides, in its complete organisation, and in the modern methods it employs. It admits over 250 patients annually, and has a resident population of over 800. Dr. R. B. Campbell, its medical superintendent, has employed for the last 7½ years, as I also did for an equal period, a staff on the male side by day, of which 40 per cent. consists of women, there being three hospital nurses, including the matron. By night 27 per cent. of the staff consists of women, including the night superintendent, who is a trained hospital nurse.

It has been stated that female nurses are more suitable for asylums admitting parochial than private patients of the richer classes. That has not been my experience at Craig House. This is the department of the Royal Edinburgh Asylum for private patients, and it is quite a separate mental hospital from the West House, which provides accommodation for poorer patients. Of the staff of 32 employed on the male side by day to attend to 100 gentlemen, exactly one-half consists of nurses, including in this number the lady superintendent and three matrons, and of these three are hospital nurses. By night, six out of a staff of thirteen consist of women, including the night superintendent, who is a trained hospital nurse. These proportions vary from day to day according to requirements, and they have perhaps been swelled by the war, but there is no difficulty in employing 40 per cent. of women by day and 25 per cent. by night in a private asylum like Craig House. Of course, there are special difficulties connected with private male patients, which are not met with in the case of parochial patients, but the employment of women in their care on the whole is equally advantageous. The opinion of the friends of patients is worth quoting. The most interested relatives of gentlemen consist chiefly of anxious females, be they mothers, wives or sisters, and nothing in my experiences gives them greater comfort than to know that the relatives whom they entrust to our care will be tended by women. Rightly or wrongly, to them it is a guarantee that no violence will be employed, and that the most skilled nursing will be available.

In conclusion, I have to state that these opinions —whatever may be their value, are founded on 20 years' experience of entire female nursing in male wards, and have been gained in four different asylums of which I have had charge during that time. I am now more convinced than ever that the mental hospital, the modern asylum, is only a hospital for the treatment of a special disease, and therefore requires to be run on hospital lines, of which the employment of women in the male wards is only one feature. Although many did not see eye to eye with me in the past, I have learned to be patient, and I have had the satisfaction of seeing these views gradually accepted and the methods I advocated adopted. The ultimate hospitalisation of the asylum is now only a question of time, and that time has been hastened by the action of many medical superintendents of the English asylums, who, owing to one of the results of the war, have introduced female nursing in the male wards of their asylums for the first time. I trust that the observations I have made may assist others in coming to a similar decision.

CLINICAL RECORDS.

NOTES ON A CASE OF PERFORATION.*

By A. D. COURTNEY, M.B.,
House Surgeon, St. Vincent's Hospital, Dublin.

The details of this case present several unusual features, and they differ in many respects from those ordinarily given in text-books.

The patient, M. D., æt. 22, dressmaker, was admitted to St. Vincent's Hospital on February 6th, 1916, at 5.35 p.m., with the following history :—She had been suddenly awakened at four that morning by a severe pain, which she referred to the upper abdomen. She was immediately given whiskey and milk, which was at once vomited unaltered; there was no trace of blood, and she did not vomit again. The pain soon became general over the abdomen, and the patient stated that she "felt so weak" that she lay quite still in bed; she did not state that it was fear of pain prevented her from moving. Gradually this condition passed off, and she felt better, but still did not attempt to leave bed. Twice during the day she had whiskey and milk and soda, which she did not vomit, and after which she noticed no ill effects. The pain, however, remained constant, and rather more in the upper than lower abdomen. The bowels and bladder did not act between 4 a.m and the time of arrival in hospital—namely, 5.35 p.m.

The history was not very illuminating, and were it not for the fact that she admitted on close ques-

* Read before the Medical Society, University College, Dublin, March 23, 1916.

tioning that she had been treated for "indigestion" some time previously, it would give very little indication of the nature of the trouble. Her general appearance was not more suggestive, for on looking at her one was struck with her apparent well being. There was not much evidence of distress or suffering. She lay quietly in bed, had a comparatively good aspect, had no vomiting, and the knees were not drawn up. Generally, a superficial examination would give no evidence of the grave abdominal lesion she was then suffering from. On a closer examination, however, there were unmistakable signs of intraperitoneal trouble. Her pulse-rate was from 110 to 120, but fairly good. Her temperature meantime was only slightly elevated, while her respirations were 26 and pretty regular. The abdomen was becoming gradually distended. The abdominal walls were rigid, but not markedly so, and certainly nothing like what Moynihan suggests when he says "one might almost think that a disc of metal replaced the supple muscle."

Tenderness was well marked over the upper abdomen; there was hyper-resonance, but the area of liver dulness was not completely obliterated. These signs, added to the history, brought me to the conclusion that I had a case of gastric perforation to deal with. As fourteen hours had already elapsed since the onset, I sent for Mr. Kennedy, surgeon to the hospital, without delay. I refrained from treatment of any kind, but had everything ready for operation.

At about eight o'clock Mr. Kennedy started operating. He opened the abdomen to the right of the umbilicus by an incision about four inches long. A quantity of greyish-green liquid welled up from all sides. The visceral peritoneum was everywhere congested, but there was no pus formation and but little lymph.

The perforation was first sought at the pyloric end of the stomach and then in the duodenum. Not finding it there, the incision was prolonged right up to the xiphoid cartilage. The perforation was found at the extreme cardiac end of the stomach and near the lesser curvature. It was so large that the tip of a finger could be easily inserted, and gastric contents were constantly welling through. Its high site, the distension of the intestines, and the constant welling through of fluid made it exceedingly difficult to get at the ulcer. At Mr. Kennedy's request, I, who with Dr. King was assisting him, drew down the stomach with one hand, while with the other I turned the left lobe of the liver upwards, and by this manipulation the site of perforation was made more accessible. At first an attempt was made to pass through-and-through sutures for purpose of closure. This was a complete failure, as the sutures at once cut through the tissue surrounding the ulcer, which was apparently too œdematous to hold any suture. A layer of interrupted Lembert's sutures was then passed from above the opening to well below it, and by these the whole ulcerated area was inverted. No other means than this single line of suture was used to close the perforation. Large quantities of gastric contents were found throughout the peritoneal cavity; these were got rid of by dry sponging. No douche was used, and this, I believe, had the double advantage of saving valuable time and obviating the danger of carrying infected material to any part of the peritoneum which might have escaped. Closure of the abdominal wound, with drainage, completed the operation.

Four drainage tubes with gauze wicks were left in: one through the primary incision drained the region between the stomach and the diaphragm; one was left in each loin, and one above the pubes. These latter three were inserted through stab incisions, which were made by simply cutting on to a finger pressed from the inside against the abdominal wall.

I believe the success of the operation depended entirely on the great rapidity with which a singularly inaccessible perforation was closed; secondly by the avoidance of douching; thirdly, the completeness of drainage secured in the minimum of time.

During the course of the operation the patient received a large amount of normal saline solution administered under each breast, the needles being under the pectoral muscles, after Lane's method. She received altogether about eight pints in this manner. The idea of administering a quantity like this is so to saturate the peritoneum with fluid that absorption of toxic products is either altogether prevented or greatly diminished, and so the toxins are got rid of through the drainage tubes. When a large quantity is administered intramuscularly, there is no necessity for rectal administration for some hours afterward, and so the patient is enabled to rest and is saved a good deal of discomfort and uneasiness which the latter method involves.

The after-history of the case is one of rapid and complete recovery. The drainage tubes were removed during the first 48 hours. At first a considerable quantity of non-purulent fluid escaped through them. No pus appeared anywhere, the wound healing by first intention.

The points I would especially emphasise are:—

(1) The perforation occurred at a very unusual time, when the stomach was completely empty, and when the patient was asleep.

(2) The site of the ulcer was unusually high up at the cardiac end of the stomach.

(3) The patient drank a considerable quantity of fluid after the accident occurring without vomiting, and apparently without adding to her discomfort.

(4) The apparent well-being of the patient when first examined some thirteen hours after perforation.

(5) Lastly, the gross signs of diffuse purulent peritonitis were certainly not present to the extent one is led to believe by the accepted writers on the subject.

There are one or two points which are perhaps worth mentioning in connection with perforation, and, indeed, all acute abdominal trouble. The question of the administration of morphia before diagnosis is made is pretty well settled; but between that and the starting of operation it is not so definite. Most writers favour its administration. I have seen in at least one case very definite injury result from this, as the patient became so relieved as to refuse operation, notwithstanding all explanations, and so placed himself in grave peril.

There is also the question of continuous rectal saline, and authorities seem strong in its favour. In the few cases I have had an opportunity of watching I have always thought that its benefit must be very striking to overbalance the discomfort, anxiety, and loss of rest to a patient who is already in a dangerously weak condition. This loss of rest is present no matter how carefully and gently the administration is made.

I have to thank Mr. Kennedy for allowing me to publish these notes.

WE regret to learn that Dr. Ellis T. Evans, Medical Officed for Abersoch, Carnarvonshire, was seriously injured when riding his motor-bicycle near Pwllheli, on April 8th. He is suffering from a compound fracture of the right leg and serious injuries to his face.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

QUACKERY AND THE ETHICS OF JOURNALISM.

To the Editor of The Medical Press and Circular.

Sir,—In closing my last letter, whilst promising to revert to the subject, I remarked that the conduct of the great bulk of leading newspapers in regard to quackery since the issue of the Report of the Select Committee has been more than scandalous. In view of the immense power which is wielded by the newspaper Press, the maintenance of a high standard of honour amongst newspaper proprietors is evidently of vast national importance. I write on this subject with a full sense of responsibility, and if I use severe terms of condemnation it is done advisedly and with forethought. My first letter on this question appeared in your pages more than thirty years ago. I then pointed out, and I have continued since to urge the same opinion here and in other medical journals, that the attitude of the newspapers has always formed the greatest obstacle in the way of medical law reform—a problem of which the quack medicine trade forms merely a part. Writing in the *British Medical Journal* a few years ago, I declared that a great number of leading papers were virtually suborned by quackery. This statement could have been easily proved at that date. Its strict exactitude is much more easily demonstrable now. If a legally constituted tribunal were to be set up—and I am not without hope that this may some day be done—it would be impossible for either the owners, the managers, or editors of a great number of leading papers which I could name to deny on oath without the certainty of a subsequent conviction for perjury, the fact that they were knowingly, for gain, conniving at the fraudulent and cruel practices which quackery in all its forms involves.

I write now only of leading papers. I have pointed out over and over again that all papers of lower grades justify their conduct by an answer, which from the point of view of commercialism seems perfectly sufficient. These papers say that they do not feel called upon to refuse advertisements which are freely admitted to great numbers of papers standing in the front rank of journalism. It must always be borne in mind that all leading papers set themselves up as censors of social and political morality, as guardians of the welfare of the people, and defenders of the interests of their country. The proprietors engage accomplished editors as daily lay preachers of high ethical ideals. They are surely bound to live up themselves to the doctrines they thus cause constantly to be inculcated. Reference to page x. of the Report of the Select Committee will show that a sum of not less than £2,000,000 is annually spent on advertisements of patent medicines alone. The Report adds that this sum does not include the amount spent on advertising "by swindlers like Dr. ——, the 'eye quacks,' the 'deaf quacks,' the cancer-curers, the consumption-curers, the electric belt makers, the curers of rupture without operation, and 'fakirs' generally."

It is thus certain that the total amount distributed among newspapers from these foul sources cannot be estimated at much less than £3,000,000 annually; and when it is considered, as I have always pointed out, that a considerable number of journals refuse to share in this income, the enormous sums gained by unscrupulous papers may be roughly estimated. I have once more quoted the list of personal quackeries given in the Report in order to suggest the possibility of getting set up a Government inquiry into this subject. It did not lie within the province of the Committee, and the fact that they went out of their way to refer to it is most significant. If such an inquiry were instituted it would show the necessity for medical law reform on the complete scale which I have always advocated; and if I were again called as a witness on the question of newspaper advertisements I would undertake to demonstrate the entire truth of the serious allegations which I have persistently made during many years against newspapers which are looked up to with respect by at least great numbers of simple, ignorant and foolish readers.

I have already taken up enough of your space on this occasion, and I purpose to come back to the question at an early date.

I am, Sir, yours truly,

Henry Sewill.

The Old Rosery,
Earlswood Common.
April 20th, 1916.

THE CONSCIENTIOUS OBJECTOR.

To the Editor of The Medical Press and Circular.

Sir,—If Dr. Gwillim Davies has "no sympathy with conscientious objectors," why does he try to bolster them up? There may be a "residuum of these men," such as are to be found among the Society of Friends and elsewhere, who from their early training have acquired a certain moral trend, but that does not make them orthodox and correct in their conduct as members of the social system of their country; on the contrary, it makes them selfish inasmuch as they decide to enjoy their immunity from danger at the expense of others, and it makes them unpatriotic because they refuse to help their country though urged to do so by the authorities of law and order—it makes them dangerous, too, because they set a bad example to others. And all their subterfuge is a hypothetical device which they call their "conscience," this same being not an innate knowledge of right and wrong (for no such faculty exists), but a secondary condition set up by modes of training, by emotion of fear and by ideas of self-conservatism. They are deceived in their interpretation of their own selves, on a par with those who say that the sun goes round the world because they think they can see that it does! I even grant that some of them are honest in their pusillanimous "convictions" that they believe what they think, but that is no reason for holding them to be correct in what they think, nor for allowing them to maintain their aloofness. An hereditary poacher thinks he is right in what he does; it is part of his "conscience"; but he knows that the owners of game preserves and rivers do not agree with him, and will instruct their keepers accordingly—that is another part of his consciousness—so he tries to outwit the police not because his "conscience" tells him he is doing wrong, but because he wants to save his own skin. And in the same way Dr. Davies' Hebridean cannibals had no "shame in the cruel practices which they tried to conceal"; they rather glorified in them and thought they were acting properly, but they knew that there was a vis major in the shape of Dr. Paton, who thought differently, and would probably punish them, so that it was an acquired fear of consequences which led them to concealment, not an innate knowledge of right and wrong. Let me state a case: Two children are brought up in different ways; one is educated to believe that theft, lying, deceit, hypocrisy, etc., are all wrong, and so

he grows up with a trend of mind regarding all such practices as wicked and to be avoided. The other is from childhood brought up to steal, to cheat and to deceive, so that to him the very things are right which to the other are wicked. Where is the "innate conscience" of right and wrong in these two contrasts? There is none; each has a cultivated consciousness, capable, perhaps, of modification or even of complete change in kind under a different system of environment. It is untrustworthy to quote definitions from popular dictionaries, and writers who in appealing to their readers use terms which have only colloquial significance and are not of scientific exactness, and there is perhaps no word in the English language to compare with this word "conscience," which has sheltered so much hypocrisy and false introspection.

Consciousness is the knowledge of what you *are*, not of what you *ought to be*, for you cannot be conscious of what you are *not*. A timid man is conscious of his timidity—it is himself. He may know that another is a "brave" man because he sees him do things of which he himself is afraid, but that is a different kind of consciousness, and not having it he cannot understand it. Personally, I cannot understand the consciousness of a man who can put his head into a lion's mouth or handle rattlesnakes; but if as a boy I had been trained at a zoological garden my consciousness might have been quite a different thing. The German consciousness is one of ruthlessness, of blind submission to discipline, of obedience to the law that might is right, that militarism is the correct "conscience" of the nation. Such a state of mind is the result of their purposive education. We, on the other hand, have developed a state of undiscipline and of "freedom" with the corresponding trend of consciousness that we are at liberty to do as we like, and if permitted to go on, the trend will favour the growth of "objectors." It is this state of mind which will have to be changed either by reasoning or compulsion, or by both. From what he tells us of his "sympathies," I am glad to think that Dr. Davies will assist the waverers in the consciousness of their duty—of what is the right thing, and the need of doing it.

I am, Sir, yours truly,
T. CLAYE SHAW.

Weymouth Street, W.,
April 22nd, 1916.

OBITUARY.

MR. CORNELIUS HANBURY, M.R.C.S., L.S.A.

MR. HANBURY passed away on April 11th at the ripe old age of 88, having been born on November 29th, 1827. He was the only son of Cornelius Hanbury, of Plough Court, and his second wife, Elizabeth, daughter of John Sanderson, of Avonthorpe, and cousin of the present Lord Sanderson. Cornelius Hanbury, senior, who lived at Wellington, Somerset, during the latter years of his life, died there on March 7th, 1869. His widow lived to the remarkable age of 108 years.

Mr. Cornelius Hanbury, the son, was educated for some years under a private tutor until he became a medical student at St. Bartholomew's Hospital. In 1849 he passed the membership examination of the Royal College of Surgeons, and in the next year that of the Apothecaries' Company. In 1876 he was elected Treasurer of the Pharmaceutical Society, of which he was a Member of the Council, as well as a Governor of St. Bartholomew's Hospital.

Towards the end of the year 1849 Mr. Cornelius Hanbury first began to attend daily at the pharmacy at Plough Court, Lombard Street, then under the control of his uncle, Daniel Bell Hanbury, and his father, Cornelius Hanbury, senior. There he became intimately asscciated with his cousin, Daniel Hanbury, F.R.S., whose studies in materia medica were to be one of the most important contributions to the science of his day. In 1868, with the retirement of Daniel Bell Hanbury and Cornelius Hanbury, senior, the two cousins became the acting partners of the firm, retaining the style of "Allen and Hanburys," first adopted in 1856, and on the retirement the subject of this memoir became sole proprietor of the business.

Mr. Cornelius Hanbury, while maintaining the same high purpose and ideals, looked far ahead and realised the possibilities of specially developing the wholesale and manufacturing lines of the firm. Years of foresighted expenditure and gradual expansion have followed. The Plough Court premises were first of all rebuilt in 1874, and at about the same time Mr. Cornelius Hanbury's only surviving son, Mr. Frederick Janson Hanbury, was taken into partnership by his father. With the changed character of the Lombard Street premises, laboratories and manufacturing premises were required and were found at Bethnal Green, and with the ever-increasing requirements these premises have again and again been enlarged and extended. In 1893 the rapidly developing business was made into a Limited Liability Company, of which Mr. Cornelius Hanbury became chairman, and his son, Mr. Frederick Hanbury, director. A little later Mr. W. Ralph Dodd, who had been many years associated with the firm, was also made a director. Coincident with Mr. Dodd's directorship extensive and commodious factory buildings were begun at Ware Mills in Hertfordshire, and there all the milk foods, the malt extracts and most of the firm's specialities are manufactured. Cod liver oil factories have also been established in Norway. There are now branch London businesses, one at Vere Street, W., of which Mr. F. W. Gamble, one of the present directors, is the head, and another at Wigmore Street, W., where the surgical instruments department is supervised by one of Mr. Frederick Janson Hanbury's sons, Mr. Reginald Janson Hanbury, M.R.C.S., L.R.C.P.Lond. (1903), now, like his brother, Mr. Frederick Capel Hanbury, a director of the company. There are branch businesses in China and at Niagara Falls, and agencies in France, Italy, Spain, India, in Australia, Africa, South America, Canada and Russia.

It is impossible in this brief notice to suggest any idea of the magnitude of the enterprise which owes its conception to Mr. Cornelius Hanbury, but it is in itself a memorial worthy of a man who combined in himself strength of purpose and far-seeing wisdom with the utmost gentleness and simplicity; a worthy type of "the fine old English gentleman." His life and example were an inspiration to all those with whom he came in contact, and the news of his death will be felt not only by those at home, but by a great number of medical friends, and of the firm's employees now serving at the front.

MR. ARTHUR E. J. BARKER, F.R.C.S.ENG. AND IREL., LONDON.

WE regret to announce the death, on active service, of Mr. A. E. J. Barker, F.R.C.S., Lieutenant-Colonel R.A.M.C., which took place on April 8th, after an attack of nephritis and acute pneumonia. Mr. Barker, who was in his 66th year, was a native of Dublin. After studying at the Royal College of Surgeons in Ireland, and at Bonn, he qualified L.R.C.S.Irel. in 1870, and L.R.C.P.Irel. in 1875. He received the F.R.C.S.Irel. in 1876 and the English Fellowship in 1880. After acting as surgeon at the City of Dublin Hospital, he later came to London, and in 1885 was appointed surgeon to University College Hospital. In 1893 he became Professor of Surgery at the hospital. When war broke out Professor Barker received the rank of Lieutenant-Colonel R.A.M.C., and became consulting surgeon to the Southern Command.

He wrote largely on surgical subjects, and was an early enthusiast in the use of spinal analgesia.

SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

Specially compiled for The Medical Press and Circular.

The Treatment of Psoriasis with Horse Serum.—Perry (*Boston Med. and Surg. Jnl.*, February 24th, 1916), following the suggestion of Gottheil that the administration of serum to a patient diminishes the sensitiveness of the skin, has tried the effect of the administration of horse serum to patients suffering from psoriasis. Six patients with well marked psoriasis were given horse serum at weekly intervals, all other forms of treatment being omitted in order that the effect of the serum might be estimated. At first the serum was given intravenously, but as two cases of anaphylaxis occurred, in the remainder of the cases it was given subcutaneously. Dr. Perry states that he could not appreciate any beneficial results from the treatment, though the patients were unanimous in their claim that the psoriasis was much improved. Two further patients who in addition to the serum had local treatment, were markedly improved, and in one of these the eruption had entirely disappeared. Dr. Perry's experience with horse serum tends to show that results from its trial accord with those obtained by others with autogenous serum, viz., that serum whether autogenous or exogenous is of little value in psoriasis when given alone, but that when combined with local or internal treatment, for some unknown reason, it exercises a favourable influence on the disease. K.

The Percussion of Cardiac Dulness.—Shattuck (*Boston Med. and Surg. Jnl.*, March 2nd, 1916), investigates the value of the evidence of cardiac enlargement afforded by the percussion of the area of cardiac dulness. He concludes that percussion easily reveals gross abnormality in cardiac dulness to the right or to the left. It may suggest abnormalities, which must then be confirmed or disproved by other means. Percussion is especially untrustworthy for finding slight enlargement of the aortic arch, for determining the level of the apex, and for discovering hypertrophy of the left ventricle, when there is little or no dilatation. It is not worth while by ordinary percussion methods to make a silhouette outline of the heart. The attempt to make such an outline by special methods of percussion has shown, in the hands of a few, results which are good, but are more or less uncertain. K.

Mitral Stenosis in Children.—Bass (*Archives of Pediatrics*, February, 1916), records two cases of mitral stenosis in young children. The first of these was a child aged ten, who had no history of acute illness, except a mild attack of measles at three years of age. The child appeared quite normal till it reached the age of six, when it was noted to be small in size, and apparently not growing taller. Physical examination then revealed the presence of mitral stenosis. The Wassermann reaction and the Von Pirquet test were both negative. The second child was aged six years, and gave a markedly positive Wassermann reaction. Neither of the children had presented any symptoms pointing to the cardiac lesion. Bass points out that in cases of mitral stenosis in children, especially where there are no physical signs of insufficiency present, though we have no definite proof of their luetic origin, syphilis should be thought of, and a Wassermann test performed. Cardiac disease, especially valvular stenosis, exerts a considerable influence on the growth of the individual. While mitral stenosis has been observed at autopsy in infants, it is an extremely rare condition. Mitral stenosis has been observed in children over five years old in whom there was no apparent ætiological factor present. Such cases have been called congenital without there being sufficient evidence of their being so. No case of mitral stenosis has been found reported in children between the ages of infancy and five years. K.

Trench Nephritis.—Wallis (*Jnl. R.A.M.C.*, March, 1916), records the results of an elaborate investigation into the pathology and nature of the so-called trench nephritis which has been made at St. Bartholomew's Hospital for the Medical Research Committee. He comes to the following conclusions:—1. The chemical changes in the urine, both as regards the diastatic activity and the nature of the proteins present, point to the condition being a true acute nephritis. 2. The estimation of the diastatic activity may be employed to differentiate the severity of the disease, and also the prognosis. 3. The low diastase values met with in the severe cases correspond with the retention of non-protein nitrogen in the blood and cerebro-spinal fluid. 4. The possible origin of the disease as the result of intestinal toxæmia or mineral poisoning is excluded. 5. There is no evidence of a recognisable bacterial infection either in the blood or urine. 6. The urine of cases of acute nephritis possesses an increased toxic action upon animals, but the nature of this agent has not been determined. 7. Although the disease has not been transmitted to animals, the experiments demonstrate that a definite illness can be induced in rabbits and monkeys, commencing eight days after the injection of the urine from acute cases, and in some with a fatal termination on the tenth day. 8. The experiments afford evidence that there is an ultra-microscopic organism present in the urine of early cases, which appears to be responsible for these ill-effects following injection of the urine into animals. 9. The investigation of scarlatinal nephritis brings out many points of interest and serves to demonstrate that we are dealing with acute inflammatory changes in the kidney in both diseases. K.

Liver Function in Normal Pregnancy.—Litzenberg (*Amer. Jnl. Obs.*, lxxiii, 2), on account of the importance given to the liver in eclampsia and toxæmias of pregnancy, undertook an investigation of the liver function, and disturbance was found in a large number of apparently normal pregnant women. The urobilinogen and the urobilin test was selected, being as near specific as any, and simple in application. Bilirubin passes from the liver and is converted in the intestines into urobilinogen, it then is absorbed and reconverted in the hepatic circulation into bilirubin, in inefficiency of the liver urobilinogen and urobilin pass into the general circulation and are found in the urine, and when found there are indicative of either abnormal distraction of red cells or liver insufficiency. Of 200 apparently normal pregnant women, 62 gave the reaction for urobilinogen or urobilin. In none of the cases was there evidence of blood dyscrasia, therefore it is assumed that there is some disturbance of liver function. Of the 62 cases giving the reaction, 11 had valvular cardiac disease and one high fever, and on account of the possibility of liver congestion from these causes were excluded. This leaves fifty-cases in which the interference with liver function could only be accounted for by the pregnancy. Congestion of the liver due to the enlarging uterus is suggested as a possible cause. This is favoured by the fact that the reaction was found with increasing frequency as the end of term approached. It is also suggested that there may be a liver of pregnancy as well as a kidney of pregnancy. F.

Compensatory Menstruation.—Condit (*Amer. Jnl. Obs.*, lxxiii, 2), reports a case of a woman from whom he removed the uterus and all the annexæ, but at the next menstrual period pre-menstrual symptoms of a normal character developed and hæmorrhage into a small nævus occurred, this continuing to occur regularly every 28 to 34 days, for twenty-one months, the nævus gradually increasing in size from monthly

increase with partial regression, until it formed a large tumour under the skin with the original nævus like a nipple. It then ruptured and external bleeding developed at a menstrual period. The tumour was removed, but at the next period swelling and extravasation of blood developed into the left mammary gland, and continued for one year regularly and then became less frequent and regular and disappeared after two years and one month. Six years after operation ecchymosis of the extensor surface of both legs occurred and recurred at irregular intervals for several months. The last attack was on the posterior surface of the leg, from the gluteal region to the ankle. It is supposed that some ovarian tissue persisted, and that the phenomena showed themselves in the skin or derivatives of the skin, and in those parts offering least resistance to the vascular changes. The phenomenon of menstruation is briefly considered, and the various theories from the literature cited with zoological analogies. The writer concludes that menstrual abnormalities or irregularities are due to blood pressure changes in the individual, together with some atrophic or pathological changes in parts where the hæmorrhage manifests itself. The demonstrations in the case reported being due to failure in the individual physical economy to adapt itself to the change brought about in the blood pressure by removal of the parts previously acting as a safety valve. F.

Neuritis in Pregnancy.—McCarty (*Amer. Jnl. Obs.*, lxxiii, 2) says that peripheral neuritis occurring during pregnancy may develop before or after labour, and may be local, involving a single nerve or multiple. It varies from a single disturbance of sensibility to complete anæsthesia, paralysis, and muscular atrophy. The less marked degrees characterise the cases occurring during the early months of pregnancy. The puerperal cases appear to be chiefly due to involvement or damage of local nerves by local conditions, such as pelvic cellulitis or other direct pressure. During gestation the frequent association with other manifestations of toxæmia points to a probable toxic origin, and this may often be due to a metabolic disturbance. Multiple neuritis appears usually in the middle or later months of pregnancy, often tingling in the arms or legs, tenderness along the course of the nerve, and may extend to anæsthesia and muscular loss of power, and often persists until after delivery. The prognosis is favourable. F.

Medical News in Brief.

Royal College of Surgeons.

Fleet Surgeon P. W. Bassett-Smith, of the Royal Naval Hospital, Chatham, and Mr. J. F. Colyer, of the Royal Dental Hospital, London, have been elected Fellows of the Royal College of Surgeons. Mr. W. B. Littlejohn, of Oxford University and St. Bartholomew's Hospital, having passed the required examinations, has been admitted a member of the College, and Mr. G. F. H. Bloom, of Guy's Hospital, a licentiate in dental surgery.

Sunday Work on Munitions.

In the House of Commons on April 17th, Mr. Pratt asked the Minister of Munitions to state what steps had been taken to carry out the recommendation of the Health of Munition Workers' Committee in favour of a weekly period of rest for all munition workers; and to what extent it had been found possible to reduce Sunday labour.

Dr. Addison, who replied, said: My right hon. friend is keenly alive to the importance of securing to munition workers an unbroken rest period of not less than 24 hours weekly. A circular recommending that this weekly rest period (preferably on Sundays) should be secured to all workers was sent out on December 7th, 1915, to all controlled establishments. This was followed by an inquiry addressed to each establishment, and a Committee was subsequently appointed to deal systematically with the subject. There are many practical difficulties in the way of securing the entire abolition of Sunday labour, but substantial progress has been made, and out of the 2,383 firms, from whom particulars have been obtained, 1,440 are now employing no Sunday labour. Of those firms who work on Sundays, 60 have notified the Department that all workers are provided with a rest period of at least 24 hours each week. Constant and pressing attention is being given to the matter, and it is hoped that the number of firms employing no Sunday labour will shortly be largely increased.

A Neutral Doctor on Wittenberg.

A neutral's confirmation of the barbarous conduct of the German authorities during the typhus outbreak at the prison camp at Wittenberg is contained in an article in the American monthly publication the *Military Surgeon*. The writer, Dr. B. W. Caldwell, of the American Red Cross, made a thorough inspection of several of the camps in Germany, including Wittenberg, in November last, and he says:—

Typhus exanthematicus made its appearance in two or three of the camps, causing frightful morbidity and mortality in one. This regrettable occurrence was due to the inhumanity of the prison commandant, who, when typhus broke out in the barracks, among the Russian prisoners, insisted upon the English, French, and other prisoners occupying the same barracks, with the infected Russians, until some 800 of the prisoners became infected with the disease, and about 300 of them died. This epidemic when the commandant was shorn of a part of his authority and effective measures were established within the camp, was soon controlled.

Medical Men and War Service.

In the House of Commons on April 12th, Mr. Tennant, replying to Sir J. Lonsdale, stated that medical men between the ages of forty-five and fifty-five were being employed as commissioned officers for general service in the United Kingdom. Doctors over fifty-five might offer their services for local employment to the General Officer Commanding-in-Chief of the Command in which they were living, or in which they desired to do duty with troops. In other words, the policy should be that the medical men of more advanced years rendered the country the better service by undertaking the care of the civil population, and thus setting free those of military age who were physically fit for duty at home or abroad.

The Child's Food.

At a meeting of the National Clean Milk Society, held on April 12th, Lord Plunket suggested that firms supplying clean milk should supply it in attractive bottles in Greek designs, instead of the present ugly vessels. Ladies might turn their attention to designing covers such as those used for bringing champagne bottles to table, and thus give an artistic pleasure to a utilitarian beverage.

Sir Thomas Barlow spoke on the failure of the various tests to produce a good imitation of mother's milk during the past 25 years, the greater number of infants' foods being deficient in fats. There should be as little tinkering as possible wth fluids intended for children. As the sterilisation of milk and the use of dried foods spread in upper class nurseries a new form of malnutrition or infantile scurvy, similar to that from which sailors on long sea voyages without fresh food used to suffer, was seen. A speedy recovery was found on giving fresh milk, a little orange juice, and a little gravy. Milk should be pure, even if it was sometimes diluted or modified, but it must not be tinkered with. There must be cleanliness of the byre, the cow, the cow's food, the vessels from which it drank, and the hands of the milker.

Soldiers and Tuberculosis.

In the House of Commons on April 19th, Mr. Tennant, replying to Major Astor, said it was considered that a man suffering from pulmonary tuberculosis was unfit to serve as a soldier. It was essential that these cases should be specially treated in a sanatorium at as early a date as possible. With this object, in the

man's own interests, arrangements had been made with the National Health Insurance Commissioners and the Local Government Board that soldiers found to be suffering from tubercle of the lung should be discharged the service at once and admitted to a sanatorium.

Major Astor: Is it not possible to alter the regulations and put this disease on all tours with other diseases, so as to give soldiers suitable treatment before they are discharged from the Army?

Mr. Tennant: I do not say it would not be possible; I think it might be possible; but whether it would be desirable or not is another matter. I will engage to have the matter further investigated.

Major Astor: Is it not the fact that there is the greatest difficulty in getting soldiers to go into a sanatorium when they will have no separation allowance, and that it is this point that should be considered?

Mr. Tennant: If they are discharged from the Army, of course, they get no separation allowance.

Major Astor: Ought they not to get treatment before they are discharged.

Mr. Tennant replied that he would undertake to have the matter looked into.

Cambridge University Finance.

Cambridge University Accounts for 1915 show ordinary receipts in the Chest amounting to £33,700, as compared with £46,800 in 1914. The expenditure amounted to £38,100 (as against £48,600 in 1914). Against this deficiency £7,000 has been transferred from the Common University Fund (contributions from colleges) and £1,350 from trust funds under the Emergency Powers Act of 1915. The balance to be carried forward is thus increased by £3,900.

The most noteworthy features in the accounts are the loss of income derived from fees and the reductions in expenditure under almost every head, which have gone far towards meeting the loss. The University now holds upwards of £90,000 War Stock and £12,000 in Treasury Bills.

The British Steel Helmet.

In the House of Commons on April 19th, Dr. Addison, replying to Mr. P. A. Harris, said the service steel helmet weighed 32 oz. Improved internal fittings were now being made which would improve the ventilation and render the helmet more comfortable. The helmet had given great satisfaction, and had saved many casualties. It was not proposed to alter the pattern. He knew of no helmet weighing 16 oz. that possessed equal resisting properties.

Mr. Joynson-Hicks: Is the hon. gentleman aware that the French helmet is much more efficient, and weighs 8 oz. less?

Dr. Addison said that was entirely incorrect.

Italian Army Doctors.

The Italian Cabinet met on April 18th to discuss a number of important measures, one being the supply of doctors and surgeons for military purposes.

According to the *Messaggero*, it was decided that the age limit should be raised for the medical services, and that doctors and surgeons up to the age of 45 who have performed military service should now be taken. It was further resolved that medical men of the 1876 class who had been rejected for service owing to illness should be called for further examination.

Sheffield Royal Infirmary.

The annual meeting of the Board of Governors of the Sheffield Royal Infirmary was held on April 12th.

Mr. H. H. Bedford (Chairman of the Weekly Board) expressed the thanks of the Board to the whole of the staff of the institution for their services, especially mentioning the honorary medical staff and the lady doctors. The work of the Royal Infirmary, he said, had been particularly heavy. In the out-patient department, where they expected that in consequence of the Insurance Act there would have been a falling off, they had had a big increase. So many people in Sheffield were engaged on munitions of war, and many of them not much accustomed to dealing with machinery and tools, that accidents had increased very considerably. Accident cases dealt with numbered no fewer than 21,236. The staff had also attended to exactly 1,000 wounded soldiers in addition to their ordinary work. The finances were a constant source of anxiety, but it was with very great feelings of gratitude that they had managed to "live" within their income, which was not a thing an institution like theirs could always do. This was due in great measure to the generosity of some of the big works. The workmen's and the Hospital Saturday and Sunday collections were all up, while Alexandra Rose Day helped them to the extent of £877. The expenditure must continue to increase in consequence of the war. In milk alone the expenditure had increased by £500 a year. He alluded to the depletion in the medical, nursing and general staff of the institution on account of the war, and gave instances of the services that were being rendered to the country by the various members of the staff.

Health Visitors.

Dr. E. C. Thomas, medical officer, has informed the Carmarthenshire Public Health Committee that the cost of an ideal scheme to combat infant mortality would be prohibitive at present, for it would require a staff of at least 10 nurses at a salary of £100 each per annum. The question was an important one, for if the mortality continued at the same rate as that recently reported during the first week after birth for a period of 42 weeks, all the children born would have died. He attributed the majority of the deaths to neglect and ignorance.

Sir A. R. Simpson's Bequest.

Sir Alexander R. Simpson has left the museum formed by his uncle, the late Sir James Young Simpson, the discoverer of chloroform as an anæsthetic, to the University of Edinburgh. He had previously given his uncle's and his own libraries to the Royal College of Physicians, Edinburgh.

Society of Apothecaries of London.

The following candidates having passed the necessary examinations were granted the L.S.A. Diploma of the Society, entitling them to practise medicine, surgery, and midwifery:—E. V. Beaumont, M. J. Byrnes, and E. N. Glover.

National University.—University College, Dublin.

The Examiners have made the following recommendations to the Senate:—

Spring Medical Examinations.

Second University Examination in Medicine.—Honours:—First Class: Heffernan, Michael. Second Class: O'Brien, Michael F., M.A. Pass (in addition to the above): Carr, Connell; Cooney, Mark A.; Doyle, Wm. F.; Garry, Patrick T.; Healy, John J.; Macabe, John J.; M'Mahon, John R.; M'Nulty, Jas. P.; M'Nulty, Madeline A.; M'Grath, Daniel P., B.A.

Third University Examination in Medicine.—First Class Honours: Chanco, Alice B., B.A. Second Class Honours: M'Carvill, Patrick; Hickey, Richard; Macnamara, Donagh W. Pass (in addition to the above): Briscoe, Abraham; Byrne, Patrick J.; Clarke, Mary C.; Conlin, Patrick J.; Irvine, Maggie; Kelly, Eugene F.; Lawlor, Solomon; Maguire, John; Mullin, John J. A.; O'Dowd, Patrick J.; Rowan, Joseph H.; Shiel, Wm. F.; Swan, Harold J.

M.B., B.Ch., B.A.O., Degrees Examination.—Honours:—Second Class: O'Connor, John J. A.; Moran, John P.; O'Sullivan, Michael; Ryan, Andrew; Bouchier-Hayes, Eileen M. E. Pass (in addition to the above): Blake, Leo; Burke, Thomas J.; Carroll, James C.; Clements, Michael A.; Coyne, Edward P.; Curtin, Jeremiah; Doherty, Annie; Dooley, Annie; Dwan John; Hughes, Daniel; Morris, Wm. M.; Murphy, Philip; O'Conell, Patrick; O'Malley, David V.; Owens, Henry E.; Pollard, John. Exempted from further examination in the subjects set after their names: Lagan, B., Medicine; Murphy, Patrick D., Surgery, Ophthalmology, and Midwifery; O'Brien, John J.; Ophthalmology and Midwifery; O'Mahoney, Thomas, Surgery and Midwifery; Walsh, Edward, Surgery, Ophthalmology, and Midwifery.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s., post free at home or abroad

Foreign subscriptions must be paid in advance. For India Messrs. Thacker, Spink and Co., of Calcutta, are our officially appointed agents. Indian subscriptions are Rs. 15.12. Messrs Dawson and Sons are our special agents for Canada. For South Africa, The Record Publishing Co., Cape Town. Messrs. Geo. Robertson and Co., of Sydney and Melbourne, are our special agents for Australia.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

WOMEN'S WORKING HOURS.

IT is stated that hours for women and girls on munition work are not to exceed sixty a week.

PRICE OF COD-LIVER OIL.

THE price of cod-liver oil is now at least eleven times the pre-war figure, and is advancing almost every week.

GIFT OF LAND TO HOSPITAL.

AN anonymous donor has made the Royal Free Hospital, Gray's Inn Road, a gift of nearly an acre of land adjoining the hospital, which would be available for an extension of the buildings particularly needed in connection with maternity work and infant welfare.

THE FALLING BIRTH-RATE.

DR. A. E. HARRIS, Islington's Medical Officer of Health, reports that for the first quarter of this year the birth-rate, 21.45 per 1,000 was the lowest in the borough in any corresponding quarter.

INFANTILE MORTALITY.

MR. LONG gives the following figures as to the deaths of children under one year in England and Wales:—

Six months ended March 31, 1913	47,274
Six months ended March 31, 1914	48,965
Six months ended March 31, 1915	50,219
Six months ended March 31, 1916	41,971

"SYNTHETIC" CAVIARE!

OWING to the sale in Berlin of coloured herrings' roes as "genuine German caviare," the *Deutsche Tageszeitung* warns the public against the counterfeit goods, reminding it that "not even our brilliantly resourceful German chemists can make synthetic caviare."

CROWDED LONDON.

BOROUGH Council returns show that London is more crowded than ever before. Islington, which once lamented the flight of residents to other suburbs, now declares the number of empty houses to be continually decreasing.

THE CLOGS OF WAR.

OWING to the high price of children's boots, the wearing of clogs by school children is becoming quite common in South London, and one bootmaker in Walworth Road has devoted the whole of his window to a display of them.

GROWTH OF NATIONAL INCOME.

MR. MCKENNA, in a Parliamentary answer, says that the gross income brought under the review for income-tax of the Commissioners of Inland Revenue for the years mentioned was a follows:—

Year.	Amount.
1904-05	£912,129,680
1912-13	1,111,456,413
1913-14	1,167,184,229
1914-15 (estimated	1,240,000,000
1915-16 (estimated)	1,380,000,000

Meetings of the Societies, Lectures, &c.

WEDNESDAY, APRIL 26TH.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—Course of lectures on the Anatomy of the Human Body, for First-aid and Ambulance Students (open to all members of ambulance companies and first-aid classes):—5.30 p.m.: Prof. A. Keith. 4 p.m. to 7 p.m.: Exhibition of Anatomical Preparations and Specimens in the Theatre on lecture days and between 10 a.m. and 5 p.m. in the Hall of the Museum on the following day.

FRIDAY, APRIL 28TH.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—Course of Lectures on the Anatomy of the Human Body, for First-aid and Ambulance Students (open to all members of ambulance companies and first-aid classes):—5.30 p.m.: Prof. A. Keith. 4 p.m. to 7 p.m.: Exhibition of Anatomical Preparations and Specimens in the Theatre on lecture days and between 10 a.m. and 5 p.m. in the Hall of the Museum on the following day.

MONDAY, MAY 1ST.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.—8.30 p.m.: The Annual Oration will be delivered by Sir St. Clair Thomson, M.D., F.R.C.P., on "Shakespeare and Medicine." There will be an exhibition of portraits, books, and other items of Shakespearian interest. The exhibition will remain open for the next three days.

TUESDAY, MAY 2ND.

ROYAL SOCIETY OF MEDICINE (SECTION OF SURGERY, SUB-SECTION OF ORTHOPÆDICS) (1 Wimpole Street, W.).—5 p.m.: Annual General Meeting: Election of Officers and Council for Session 1916-1917.

ROYAL SOCIETY OF MEDICINE (SECTION OF PATHOLOGY) (1 Wimpole Street, W.).—8.30 p.m.: Annual General Meeting: Election of Officers and Council for Session 1916-1917. Communications: Dr. Andrewes. Dr. J. A. Murray: A Transplantable Tumour of the Guinea-pig. Dr. B. H. Spilsbury: Specimen Illustrating Toxic Hepatitis. Mr. Shattock: (1) Some Points in Connection with the Vermiform Appendix; (2) Some Specimens Illustrating Gun-shot.

Vacancies.

Leeds Public Dispensary.—Lady Resident Medical Officer. Salary £130 per annum, with board, residence and laundry. Applications to the Secretary of the Faculty, Public Dispensary, North Street, Leeds.

Manchester Northern Hospital for Women and Children, Park Place Cheetham Hill Road, Manchester.—Lady House Surgeon,, Salary £120 per annum, with apartments and board. Applications to Mr. Hubert Teague, Secretary, 38 Barton Arcade, Manchester.

Royal Berkshire Hospital.—House Surgeon. Salary £250 a year, with apartments, board and washing. Applications to Herman Burney, Secretary.

The Royal Infirmary, Sheffield.—House Physician. Salary £120 per annum, with board and residence. Applications to Jno. W. Barnes, Secretary.

Victoria Hospital, Burnley.—Female House Surgeon. Salary £160 per annum, with residence, board and washing. Applications to F. A. Hargeaves, 7 Grimshaw Street, Burnley.

St. Bartholomew's Hospital, Rochester, Kent.—Senior Resident House Surgeon. Salary £300 per annum. Applications to Charles Speyer, Secretary.

Winsley Sanatorium, near Bath.—Assistant Resident Medical Officer. Salary £250 per annum, with board, residence and laundry. Applications to Frederick Jones, Secretary.

Bury Infirmary.—Senior House Surgeon. Salary £250 per annum, with board, residence and washing. Applications to the Hon. Secretary, Infirmary, Bury, Lancs.

Putney Hospital (Chester Bequest), Lower Common, Putney, S.W.—Resident Medical Officer. Salary £150 per annum, with rooms, board and laundry. Applications to the Hon. Secretary, at 198 Upper Richmond Road, Putney, S.W.

Appointments.

ERSKINE, W. J. A., M.D.Edin., Medical Superintendent Isle of Wight Asylum, Newport.

FARRER, R. T., M.R.C.S., L.S.A., Certifying Factory Surgeon for the Brighouse District, co. Yorks.

PALMER, A. S. M., M.D.Cantab., Medical Officer of the Convalescent Home, Worthing, of the Kingston (Surrey) Union.

SMITH, J. H., M.B., C.M.Edin., Medical Officer of the Institutions and First District of Stockport Union.

Births.

FULLER.—On April 17th, at Milnthorpe, Westmorland, the wife of W. A. Fuller M.R.C.S., L.R.C.P., of a son.

WARD.—On April 17th, at Withycombe Lodge, Torquay Road, Paignton, to Dr. and Mrs. Ward—a daughter.

Marriages.

DARLINGTON—BATCHELOR.—On April 20th, at Grange Road Presbyterian Church, Birkenhead, Captain G. Hellyar Darlington, R.A.M.C., son of Mr. and Mrs. J. Darlington, of Liverpool, to Ida M., elder daughter of Captain J. W. Batchelor (Liverpool Salvage Association), and the late Mrs. Batchelor, of Birkenhead.

DAVIES—EDMUNDS.—On April 18th, at Holy Trinity Church, Southport, Dr. Ll. E. Davies, son of the late William Davies, of Southport L.R.C.P., L.R.C.S.Edin., to Mary Constance, daughter of the late Richard Edmunds, J.P., M.R.C.S., L.R.C.P., of Pontnewydd, near Newport, Mon.

DRURY—BROWNSWORD.—On April 19th, at St. Barhtholomew-the-Great, London, Alan Nigel Drury, Lieut., R.A.M.C., youngest son of Mr. H. C. Drury, M.V.O., and Mrs. Drury, of Northwood, Middlesex, to Daphne Marguerite, elder daughter of Mr. H. A. Brownsword and Mrs. Brownsword, of Rollesby Hall, Norfolk.

Deaths.

ELWIN.—On April 24th, at 23, Alwyne Road, Canonbury, Charles Jeken Elwin, M.R.C.S., for 37 years at 6 City Road E.C., in his 82nd year.

STEVENS.—On April 13th, at Southampton, after a long and painful illness, George Stevens, F.R.F.P.S.Glas., late of Norton, Suffolk, aged 75 years.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, MAY 3, 1916. No. 18.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

The "Edinburgh Review."

THE *Edinburgh Review*, which in spite of distinguished competition remains the greatest of the Quarterlies, contains in the current number two articles which hold a very particular interest for medical men. The first is on "The Psychology of the English," by Mr. Havelock Ellis, a writer who has contributed a great deal to our knowledge on some important subjects of which it would be a good thing if everyone knew more. The present article is, however, quite free from the reproach which has been levelled at some of his other writings by the prudes and the hypocrites, more eager for external righteousness than for inward grace, who are said by the French to constitute the majority of the inhabitants of these islands. "The Psychology of the English" is intensely interesting, and no medical man with a broad outlook should miss reading it. The other article is on "The Control of Venereal Disease": I shall return to it presently.

Sydney Smith.

THE *Edinburgh Review* was started in 1802 by a few men, of whom at least three—Sydney Smith, Brougham, and Jeffrey—lived to be famous. The inception of the great quarterly was thus described by the first-named, who was probably the wittiest man that this country has produced: "I proposed that we should set up a review. This was acceded to with acclamation. I was appointed Editor, and remained long enough in Edinburgh to edit the first number of the *Review*. The motto I proposed for the *Review* was 'Tenui Musam, meditamur avena' (We cultivate literature on a little oatmeal). But this was too near the truth to be admitted; so we took our present grave motto from Publius Syrus, of whom none of us had, I am sure, read a single line." The motto referred to is "Judex damnatur cum nocens absolvitur"—which, being translated, means "The acquittal of a criminal displays the incapacity of the judge." Macaulay, most of whose Essays originally appeared in the *Edinburgh* thoroughly upheld the principle of this motto.

Some Stories.

SOME of the stories concerning Sydney Smith and his *Review* colleagues are immensely funny. Of Francis Horner, one of these colleagues, he said that "he had the Ten Commandments written on his face, and looked so virtuous that he might commit any crime with impunity." At a much later period, seeing Brougham's carriage with "B." surmounted by a coronet on the panel, Sydney Smith said, "There goes a carriage with a B. outside and a wasp inside." One of the most amusing stories of the *Edinburgh* days is the following: "Leslie, the Scottish philosopher, had called upon Jeffrey just as the latter was going out riding, to ask him to explain some point concerning the North Pole. Jeffrey, who was in a hurry, exclaimed as he rode off: 'Oh! damn the North Pole!' This hurt Leslie's feelings, and he complained of it to Sydney Smith, who entered gravely into the matter, and told him in confidence that he himself had once heard Jeffrey speak disrespectfully of the Equator!"

Venereal Disease.

FOLLOWING a tradition which used to be *de rigueur* in English magazine articles, the name of the contributor who deals with "The Control of Venereal Disease" is withheld. That does not prevent me from offering him my humble compliments upon the thoroughness and excellence of his work. After a brief but lucid preamble addressed to the lay reader upon some points in connection with venereal diseases which are alphabetical to all medical men, the writer inquires into the best means for preventing and ultimately stamping out these dread scourges, even as typhus, typhoid and small-pox have been practically stamped out. The result is a well-reasoned, clearly written article, full of tact and discretion, revealing the wide outlook of a far-seeing orderly mind. It is an article to which every medical man should give very careful attention, and, in so far as he is able, he should see to it that it is well read by the laity. It might very suitably be issued in pamphlet form for distribution by doctors among their patients.

An Obstacle to Progress.

"One serious impediment to successful treatment," says the writer, "is the resort of patients to unqualified practitioners such as chemists and druggists and medical herbalists . . . As regards resort to unqualified persons and the employment of quack remedies, much detailed evidence is given in a Parliamentary Paper issued in 1910 (Cd. 5422). It is there stated that in many of the great towns the treatment of venereal diseases is largely in the hands of unqualified persons. There can be no doubt as to the resulting mischief . . . Dr. Johnstone, a medical inspector of the Local Government Board who made a valuable report on venereal diseases to that Board just before the work of the recent commission began (Cd. 7029, 1913), stated that medical men in various towns informed him that they were rarely consulted until the patient had spent some weeks in the hands of a herbalist or chemist, or in trying some advertised cure." This is common knowledge to every medical man who is acquainted with the conditions of practice, especially in the smaller towns.

A Courageous Commission.

In spite of this, and indeed of much more which could be said on the subject, "the Royal Commission do not propose any direct action in regard to unqualified practice. Doubtless they have refrained from doing so because of the thorny character of the problem, and the apparent impracticability of securing, so far in advance of public opinion, the legislation which would be required to secure practical reform. They content themselves with strongly endorsing the recommendations of the Select Committee on Patent Medicines that all advertisements of remedies for venereal diseases should be prohibited."

Want of Training.

A curious point which the Report of the Commission seems to emphasise is the alleged need for additional medical training in relation to venereal diseases. It is probably true that men trained more than twenty years ago have very antiquated notions about the diagnosis, prognosis and treatment of these diseases, and it would certainly be safe to admit that the gravity of gonorrhœa is not sufficiently recognised even by those who have been qualified more than ten years; but I think it is an exaggeration to say that the man whose qualification bears a date as recent, say, as 1910, is in any way behindhand in the knowledge necessary to the prompt diagnosis and adequate treatment of either of these diseases; and the more recent his diploma, the better equipped in such knowledge is a man likely to be. The teaching of the schools is certainly thoroughly up to date, and the attitude of the ordinary medical student is usually such as to cause him to assimilate such teaching with something akin to avidity.

A Quotation.

The Report of the Commission and its recommendations are very well and soundly criticised, in the real sense of the word, by the writer of this admirable article. What he has to say on the questions of notification (p. 369) and prophylaxis (p. 371) are specially worthy of attention. I have already drawn freely on the text, but I cannot refrain from adding this further quotation as a sample of the spirit in which the matter is dealt with. "Even were it true that all venereal disease is due to immoral conduct, that none is inherited, none innocently acquired, it would still be difficult to understand how any thoughtful and humane person could deliberately prefer that mankind should continue to suffer from these terrible diseases rather than that a sinner should be speedily cured. The experience of the world proves conclusively that in no country has the dread of venereal disease ever prevented the existence of irregular sexual relationships. Few people who are able to look facts in the face can hold the belief that the world will ever reach a stage when the rules of monogamy are strictly and universally observed. But if that stage should ever be reached, it is certain that the change will be due to moral causes, not to a materialistic fear of specific diseases. Do the people who refuse to "condone vice" really think that it is justifiable to allow the race to be saturated with syphilis while waiting for an epoch of universal purity?"

The "Contemporary Review."

In the *Contemporary Review* for April Sir Thomas Barlow deals briefly, but effectively, with the Report of the Royal Commission. He tells us that the Committee of the National Council for Combating Venereal Disease (Kingsway House), of which he is chairman, "was initiated shortly after the appointment of the Royal Commission, with a view to endeavouring to carry forward the recommendations of the Commission when they were issued, and to rouse the public conscience as to their urgency. Hitherto its efforts during the war have been specially directed to giving voluntary warning lectures by medical men to large bodies of soldiers, with the sanction of the War Office, and also to courses of lectures addressed to social workers. Whilst continuing this necessary work, it is hoped that an educational propaganda may now be initiated, specially addressed to municipal bodies, but appealing to all men and women of goodwill who desire to grapple with one of the most potent causes of national degeneracy." In this admirable work the Council can count upon the goodwill and, as far as is possible, the active co-operation of every member of the profession.

A New Gospel.

In the same, the April, number of the *Contemporary* there is an article by Mrs. Dew, entitled "Why Need We Be Poisoned?" which is deserving of more than a cursory notice. I shall hope to return to it later. It sets forth something in the nature of a new gospel on the already well-worn subject of dietetics. The high priest is Mr. William Aird, who seems in one sense at any rate to be a phenomenon, for he is completely disinterested. The gospel has the merits of extreme simplicity in exposition and of extreme cheapness in practice. "Live on foods that need no cooking—fruits, vegetables, nuts—until you feel

fit." Mrs. Dew closes her article, which amounts in reality to the testimony of a beneficiary, with the following essentially human and engagingly disarming words: "This appeal is not made to the shining ones of the earth, or to those who walk humbly in their footsteps. It is made to the weak, the self-indulgent, the greedy, the gluttonous, and the selfish, by 'One of Themselves.'"

The B.M.A.

I am sometimes asked what the British Medical Association has done to me that I should continue to hold it up to obloquy. The reply is that the matter is not a personal one. As an individual I have nothing against the Association. It has never done me any harm; though some years ago, fearing its proved capacity for bungling and bad faith, I deemed it wise, by resigning my membership, to deprive it of any power to affect me adversely. My case against the Associations rests purely on public grounds. In the uninstructed public eye, the British Medical Association represents the medical profession, and it is right that this eye should, if possible, be educated to see clearly in this matter; it must be taught to realise that the British Medical Association no more represents the profession than Upper Tooting represents the Empire. Of its unfortunate want of tact, taste and temper I have already given several examples in connection with the recruiting of the profession for war purposes; of its behaviour in connection with the Insurance Act I could say a great deal, and much that I could say (and intend on some future occasion to say) on this subject, would surprise even those who already hold it in small esteem. My present purpose is to call attention to the manner in which it "represents" the interests of the profession in a matter of no inconsiderable importance.

Notification Fees.

On page 565 of the *British Medical Journal* of April 15th, 1916, under the heading "Notification Fees," there appears an account of the consideration in Committee of the House of Commons of the Local Government (Emergency Provisions) Bill, which included a discussion on the fees payable to medical men for notifying the diseases which under statute are compulsorily notifiable. These fees, as is well known, have hitherto been 2s. 6d. per notification, a sum which the authorities now proposed to reduce to one shilling. On grounds which must be perfectly obvious to any thinking member of the profession, this proposed reduction was resisted. What does the British Medical Association do? Does it support the resistance and object *in toto* to any reduction in the already meagre scale of fees for work which, while requiring skill, time and judgment on the part of the doctor, is of enormous value to the community? Let us see.

The B.M.A.'s Part.

I quote from its own report "The deputation from the British Medical Association admitted that one shilling would be sufficient for notifying measles, but urged that 2s. 6d. should be retained for all other diseases." To this the authorities promptly replied that "they could not differentiate between different diseases, and that if 1s. was sufficient for the notification of measles, then 1s. was sufficient for drawing up a simple form with regard to other diseases notified." Now this retort, thus kindly put into the official mouth by the British Medical Association, is logically and scientifically unanswerable. "If you can do measles for 1s., why not scarlet fever? And if scarlet fever, why not all the rest?" To this thrust there is no possible riposte; and the weapon for the thrust is genially placed in the official hand by the British Medical Association, which claims to watch over and represent the interests of the general practitioner! Could there anywhere be found a better instance of the pettifogging, suburban spirit, the meanness of outlook, the paucity of imagination, and the dunderheaded diplomatic dabbling so characteristic of the Association and all its works, than is displayed in this, their own narrative of the brains and tact they brought to bear in negotiating with the Government?

Measles.

Even were it the case that the diagnosis of measles is a more simple matter than the diagnosis of any of the other notifiable diseases, the information would scarcely have been volunteered by any sane person negotiating to maintain the present scale of the notification fees. But it is not the case: the exact contrary is the case. Everyone outside the British Medical Association knows that in its most infectious—that is, its pre-eruptive—stage, the diagnosis of measles presents enormous difficulties. Except for the rare prodromal rashes, which are difficult to recognise, and Koplik's spots, which must be remembered before they are sought (and when present are not always characteristic) there is very little to guide the practitioner to differentiate between an ordinary harmless coryzal catarrh and a disease which, in its immediate results and late consequences, is now properly regarded as one of the most deadly and dangerous from which infants and young children can suffer. The disease, on which the British Medical Association elected to give the general practitioner away, was thus singularly, but characteristically, ill-chosen. This is how the interests of the profession are "looked after" by the self-satisfied bunglers at 429 Strand, London, W.C.

A Protest.

A correspondent writes: "It may be true that in *some* 'Red Cross Hospitals' the wounded are being treated gratuitously by surgeons and physicians. It is certainly not so in all cases. While I am writing may I suggest that someone should lift up his voice to point out the egregious folly of making women 'Commandants' of Voluntary Aid Detachments, and thus placing them 'in command' of men?" The voices are there, ready to be lifted with a will, but to whom could such necessary protests be addressed with any prospect of success? Sinapis.

The expenses of the Commission on Venereal Diseases were £3,585.

AVIATORS' SICKNESS.

The translated article which appears in the columns of our present issue, under the title heading above transcribed, establishes the fact of the addition of a new item to our previously long-drawn-out roll of human maladies. It will also remind the thinking reader of the truth so invariably—and impressively—verified, at every forward step made by Homo sapiens in the advancement of intellectual culture, and in the promotion of physical enjoyment, something of counterbalancing evil never fails to present—*surgit amari aliquid*, to recall the highly applicable phrase of the most philosophic of all poets—which successfully discounts the value of the calculated gains; or even completely neutralises their anticipated value. Thus the air-plane, like the motor car, in its early stage of evolution, was found to function incidentally as the active sacrificial agent in the summation of the devotional rights of Nemesis after the joyous celebration of man's greatest mechanical conquest. To the abiding credit of the stimulus afforded by the last infirmity of noble minds, the enthusiasm of the inventive scientist and that of the practical voyager of the aerial ocean never faltered in presence of the inevitable physical dangers and drawbacks, and the astonished world was soon electrified by the respective single and duplicated cross-Channel flights of a Blériot and a Rolls.

The unprecedented rapidity of movement which has characterised the progress of aviation is most closely paralleled, perhaps, by the wondrous evolution of the "moving picture"—which, all so familiar as it has now become, can well sustain a claim quite as substantially based as that of the "wireless" or that of the air-plane, to the dignity of a modern miracle in its effective diminution of the measurements of our globe's latitude and longitude. Thus far has the rising generation of "our decadent race" been elevated on a spring-board of incalculable projecting power for the start on the Marathon cycle of human existence. The cinema takes no toll of life, and would seem to debit its votaries with nothing much worse than some nystagmic oscillation—and some pathological inoculation of juvenile morality, especially in the department of burglarious adventure, of which the possibilities are so frequently and meticulously displayed on the screen.

The features of aviators' sickness necessarily display a cousin-germanship with those of the *mountain sickness*, which has been so frequently rediscovered and redescribed since its original introduction to the expanding field of vision of Western Europe by the Spaniards, who had themselves been introduced to its intimate acquaintance for the first time on reaching the Peruvian Andes, and attempting to scale the previously unknown altitudes of the more inviting summits of the most majestic of all mountain ranges. There their Peruvian guides gave the newcomers an introductory description of the symptoms. There, too, the then benevolent and hospitable citizen of the community of the formerly graceful and glorious civilisation of the Incas made the ruthless "pale face" acquainted with the value of the *coca* prophylactic against the syndrome of breathlessness and muscular fatigue with which the experiences of ages had made them familiar, and against which the benevolent Spiritual Father had furnished them a local vegetable prophylactic. Thus it was that Europe was furnished on the return of the Spaniards after the first trans-Andean expedition with a new and interesting *quasi*-clinical syndrome, and an effective and correspondingly interesting prophylactic: one of the relatively few loudly vaunted remedies which has been found to resist successfully the critical wear and tear of a series of centuries, and has continuously retained a place in the public eye—in some of its natural forms or modifying *Preps:* infusion, decoction, pill, lozenge, mixture, tincture, crystalline "active principle," or even stimulating wine. It is of practical importance, as well as historically interesting, to recall the fact that Southern America was then rapidly made to represent a new and teeming arsenal of the most powerful weapons for the conquest of disease. The druggist and the clinical physician were prominently in—very active—evidence, then as now; each was on the look-out for new and profitable material; each was already far too conscious that the reputation of many of the older infallible remedies had been worn threadbare at home, and that vast "business" prospects opened out in the far-off vistas of the then mysterious New World—with possibilities for the elaboration of new and unrivalled claims, which could be successfully discounted only after the expenditure of much and highly unprofitable laborious exertion. And here we find the illustrious physician, Monardes of Seville, the founder of the modern clinical reputation of therapeutic iron, furnishing the earliest authoritative of the many new items of the medical armamentarium: Peruvian balsam, sarsaparilla, sassafras, guaiacum, tobacco (!), etc., etc. Many of our experienced readers have probably discovered for themselves, or through others, by this time, that the temptingly "convenient" use of preparations of active principles falls very short in the resulting clinical efficacy of that claimed for the old, crude, fresh preparations of the materials directly furnished by Nature. Some are still found, here and there, who are perverse enough to believe that of the now time-honoured quinine itself, attempts at the laboratory synthesis of which have hitherto failed in realisation—while producing innumerable interesting coal-tar by-products, which have been made to pay the expenses of those very costly procedures by the enterprising German firms who produced them accidentally; and had them certified in the rat-mouse-rabbit-guinea-pig hospital laboratory and thence transferred. . . ! Such is the history of the genesis and evolution of most of the synthetic products, the articles whose names terminate in an "ine"! This by the way.

The phenomena presented by the respective syndromes of mountain sickness and aviators' sickness are inevitably similar in many of their most characteristic features. The changes of atmosphere pressure and proportion of oxygen are the parallel factors in the two cases. The contrasting factors are: that in aviators' sickness we have the rapid transition to a highly modified medium, without any appreciable interval available for possible acclimatisation; while in mountain sickness we have a slow transition, which is very prone to be more than counterbalanced by the progressive muscular fatigue. It is gratifying to reflect, in conclusion, that the rapid scientific mastery of a novel and highly interesting syndrome is a characteristic feature of this rapidly moving age.

CURRENT TOPICS.

Torsion Injuries of Muscles of the Abdominal Wall.

In the *New York Medical Record*, G. F. Boehme draws attention to the above. He defines the conditions described as being any injuries to the muscles or their attachments, caused by the sudden rotation of the body on its vertebral axis laterally, or the sudden extension of the abdominal muscles by a movement in the vertical plane. The four cases he has seen were brought about by the sudden throwing of a weight with the twisting of the body laterally. The traumatism was occasioned by the sudden contraction of the muscles of the abdominal wall against a resistance. There was a sense of something giving way with a sharp pain, and there was found to be an inability to repeat the attempt. In some instances breathing, where of the abdominal type, was painful and markedly limited. On examination a point of tenderness was made out, either in the rectus injured or in the oblique muscles (three cases). Sometimes a slight separation, as evidenced by a dimple-like depression on attempting to use the muscle, could be made out. Movements involving use of these muscles were much limited by pain at the site of the injury. The pathology of the process is simple. Apparently with the intense muscular strain certain fibres in the recti or oblique muscles are ruptured, and the tear creates a painful area within the muscle bodies. An adhesive plaster dressing was employed which has proved eminently satisfactory. An adhesive band, 2 inches in width, starting just external to the anterior superior spine of the uninvolved side, was carried around the body to the opposite side of the vertebral column. This was applied during complete expiration. From the opposite anterior superior spine a similar band was carried in the direction of the uninvolved external oblique, crossing the first band at the medium line and ending on the opposite in the back. As many bands were carried up the body as was necessary to immobilise the abdominal wall and to relieve the pain. The relief was instantaneous, the patient was able to resume work of a general variety, although torsion movements were interdicted. As a rule recovery ensued in about two weeks.

King Edward VII. Sanatorium.

We have received a copy of the ninth annual report of the King Edward VII. Sanatorium, Midhurst, covering the year July, 1914, to July, 1915. It states that after the outbreak of war the number of applications for admission fell considerably, as did also the number of patients in residence. This is attributed to the uncertainty of the times, and to the prevalence of rumours that the military authorities were about to take over the institution. Gradually matters settled down, and the number of applicants approximated to normal. Reference is made to the reception, by arrangement with the War Office, of soldiers, mainly members of the Expeditionary Force, suffering from pulmonary tuberculosis. Fifty, and later seventy, beds were reserved for this purpose. The arrangement lapsed in June, 1915, when the National Insurance Commissioners became responsible for the care of consumptive soldiers. On account of the absence with the R.A.M.C. of the Pathologist and First Assistant Medical Officer, laboratory research has been suspended, though clinical work is still carried out. During the year 352 patients were discharged, of whom 258 were civilians, and 94 officers, non-commissioned officers and men from various branches of His Majesty's Forces.

The report states that three years of continuous observation upon the use of tuberculin in diagnosis and treatment were completed at the end of the year 1914. It was then deemed advisable to discontinue this method of treatment until the immediate and subsequent results obtained at the Sanatorium since the adoption of tuberculin had been more fully worked out. Some years must necessarily elapse before the influence of tuberculin can be estimated with any certainty. The evidence as yet collected, however, does not suggest that the use of tuberculin increases, to any demonstrable degree, the efficiency of sanatorium treatment. On the recommendation of the Consulting Staff, a preliminary report upon treatment with tuberculin by the Medical Superintendent, Dr. Noel Bardswell, has been published. The difficulty of compiling statistics of ultimate results is emphasised. It is practically impossible to keep in touch, year by year, with every patient who has been discharged, and each year the task becomes more onerous. With the aid of a Government grant, an officer has been specially employed to make thorough search of old patients who have been lost sight of, so that the statistical returns are now more complete.

The Question of Milk.

An evening paper remarks that "One of these days the people will rise in their wrath to demand something drastic in respect to their infants' food—milk. This topic grows old without growing respectable. While the limit of safety is put at 60,000 bacilli to the cubic centimetre, it is still impossible to get milk in London with a lower rate than a million bacilli, and in one district the rate is twenty-eight millions." At present milk costs 6d. per quart, which is the highest price, it is stated, within living memory. And worse remains, for there is general outcry that milk is dirtier and more adulterated than ever. A grave responsibility rests on Parliament in this matter. There is on the Statute Book an Act passed for the purpose of protecting the public against unscrupulous dairy farmers and milk dealers. This Act received the Royal Assent in August, 1914, yet has never been enforced. Parliament, in its wisdom, suspended its operation till six months after the war, the ostensible reason being the difficulty of obtaining the large staffs of inspectors necessary to carry out its enactments. The purpose of the Act is to make better provision with respect to the sale of milk and the regulation of dairies, and it was the opinion of the Local Government Board that the Act covers almost every point relating to the impurity and the impoverishment of milk. It enables the Board to make orders for the following:—

The registration with local authorities of all dairies.

The inspection by local authorities of dairies to see to the cleanliness of premises, the persons employed, and the utensils in use.

The prohibition of the addition of colouring matter, or skimmed or separated milk or water, or any other substance, to milk intended for sale for human consumption, or the abstraction from milk of butter-fat or any other constituent.

It is clear that an energetic use of the powers conferred by the Act will go far to check what can only be described as a flagrant scandal. With the approach of summer and the appalling prospect of widespread epidemic of "summer diarrhœa," the action of Parliament in suspending the enforcement of the provisions of this beneficent measure is to be deplored. Infant mortality, excessive now, must largely increase. The country's business at present is "killing Germans." We should see that we do not kill British babies. We know of no class of labour which can be less spared than that

required for the carrying out of the provisions of this suspended Act of Parliament. The whole question urgently requires reconsideration by a legislature which only meets three times weekly.

Worry and Insanity.

THE second volume of the annual report of the London County Council for 1914—"Asylums and Mental Deficiency"—contains a report by Dr. Mott. Pathologist to the Council, on the work accomplished in his laboratories during the year. An important investigation was that into the incidence of mental deficiency among the offspring of the insane in the London County Asylums. The families of 588 insane persons were investigated, and, according to reports received from the education authorities, only 15 (2 or 3 per cent.) of these had mentally defective children. Only 56 out of 573 parents had children after their first attack of insanity, and 106 children were born after the onset of insanity in the parent, whereas the remaining 1,259 children were born before the parent became insane.

Dr. Armstrong Jones, the Medical Superintendent of Claybury Asylum, emphasises in the report the influence of domestic trouble, stress, and anxiety on mental trouble. These factors justify the common belief "it's worry, not work, that kills." He has rarely, he states, seen insanity result from overwork alone—*i.e.*, apart from loss of sleep, fatigue, and ill-health.

Remedy for Street Accidents.

THE May number of the *Great Western Railway Magazine* points out that while street accidents in London caused by tramway-cars, motor-cabs, and private and commercial motor-cars were anything from 50 to 150 per cent. more in 1915 than in 1913, there was a decrease of 18 per cent. in the accidents caused by motor-omnibuses. This result is attributed in part to the reduction in the number of motor-omnibuses running, and also partly to the fact that the London General Omnibus Company have given their support to the "safety movement" initiated by the Great Western Railway Company two years ago, and have carefully coached their employees in "safety first" principles. By means of advertisements in the newspapers the company give useful advice to the public on the avoidance of street accidents. The cinematograph also is to be used, and it is hoped, with the assistance of the education authorities, to teach children how to avoid the traffic dangers of the streets.

The Treatment of Tetanus.

OUR French correspondent writes:—In cases of tetanus, Dr. Demmler (Academy of Medicine) uses much higher doses of chloral than the habitual 8 to 16 grammes per die. He pushes the doses to 20 and 25 grammes. He considers that in affections in which the nervous system presents a very marked hyperexcitability, the drug only becomes toxic when the nerve-cell has regained its normal functional state. He quotes in favour of this theory the high doses of opium (1 gramme and more) given in tic-douloureux of the face (Trousseau), of sulphate of strychnine (2 to 5 centigrammes) in delirium tremens (Luton), etc. Experience confirms his ideas on this subject. In tetanus he begins with a dose of 6 grammes of chloral, which is sufficient to induce sleep or analgesia. Six hours later he gives another dose of 6 grammes if the patient has not been calmed. He then increases progressively up to 20 or even 25 grammes. As soon as the patient sleeps soundly enough not to be awakened by slight noises (people talking in a rather high tone or walking in the room) the doses are progressively diminished until they attain the amount usually employed, but they are immediately increased if nervous hyperexcitability reappears. The patient is placed in a separate room far from any noise, and the curtains are kept down. Dr. Capilan applied this treatment in a very serious case of tetanus, and although the patient had been considered as lost he made a complete recovery.

PERSONAL.

DR. H. LEIGH GILCHRIST has resigned his commission in the R.A.M.C. on account of ill-health and is resuming his practice at Carlisle.

DR. GEORGE PEARSON, resident house surgeon at the Victoria Central Hospital, Liscard, has resigned at the request of the committee in consequence of a protest by the honorary doctors against the employment of a single man, and a conscientious objector.

WE have been officially informed that the next Session of the General Council of Medical Education and Registration will be held in the new premises, 44, Hallam Street, Portland Place, London, on Tuesday, May 23rd, when Sir Donald MacAllister, the President, will take the chair at 2 p.m.

SIR WILLIAM MILLIGAN, M.D., consulting surgeon to Manchester Ear Hospital, and lecturer on Diseases of the Ear at the Victoria University, Manchester, suggests that the medical profession in this country express its disgust at the conduct of Dr. Aschenbach at the Wittenberg prisoners of war camp, by deleting from the honorary list of the Royal Society of Medicine the names of any Germans found thereon.

THE RIGHT HON. JOHN FREDERICK CHEETHAM, P.C., of Eastwood, Stalybridge, Cheshire, and Dukinfield Lodge, Manor Road, Bournemouth, Liberal M.P. for North Derbyshire 1880-85, and Stalybridge 1905-10, bequeathed £1,000 each to the Victoria University, Manchester, and the Ashton-under-Lyme District Infirmary. The woodland adjoining "Eastwood" he left to the executors to devote and set apart the same as a sanctuary or reserve for the fauna and flora of the district.

WE are glad to notice that Dr. Perry G. Goldsmith, who relinquished a large private practice in Toronto and came over to this country with the first Canadian contingent, has been promoted to Lieutenant-Colonel. He has done splendid service at Boulogne and Treport in France, and is now second in command at the Canadian Hospital, Folkestone. His compatriot, Dr. C. Cooper Cole, has, we regret to learn, been wounded whilst serving with Princess Patricia's regiment.

THE Queen has sent a contribution of £100 towards the special fund which is being raised by the Anglo-Russian Hospital Committee, 32, Victoria Street, for a field hospital of 100 beds and a fleet of motor ambulances to work with the Russian Army.

MR. WILLIAM COOPER, of Compton, Wolverhampton, bequeathed £100 each to the Wolverhampton and Staffordshire General Hospital and the Wolverhampton and Midland Eye Hospital.

DR. ALFRED LEWTHWAITE, late of Fulham Dispensary, has been appointed a tuberculosis officer of Essex County Council in place of Dr. W. R. G. Roberts, killed in action, at £500 per annum, with £120 a year for travelling and subsistence expenses.

CLINICAL LECTURE

ON

THE SYNDROME: "AVIATORS' SICKNESS." AN EXPERIMENTAL STUDY OF THE ARTERIAL TENSION DURING FLIGHT.

By M. G. FERRY, Aide-major de 2e Classe, Parc d'Aviation 6, France.

[Specially Reported for this Journal.]

What are the sensations experienced in the course of their atmospheric ascents, by aviators, pilots and passengers? This is a question which everyone has asked himself on seeing one of those winged humans gliding across the azure vault of the heavenly canopy. The response is quite inevitably none of the easiest; and one of the special causes of the difficulty of answering is one which does not at once suggest itself. We find, on questioning the returned voyagers, the astonishing result that they form two groups of quite opposite views and facts of experience. The members of one of those groups freely avow the feelings of malaise with which they had been affected at the different altitudes—which had been attained more or less rapidly. The others, on the contrary, who would seem at first to form a much more numerous group, promptly erect the aviator's *amour-propre* into a defensive barrier against the intrusion of the curious; and accordingly, when questioned on the subject, formally and absolutely deny in definite fashion that they have at any time, or in any stage of aerial ascent, ever experienced even the slightest degree of malaise. So pronounced a degree of discordance obviously renders the matter of formulation of any general rules of practice in this connection a matter of extreme difficulty.

Being persuaded that even the most accomplished aviator must be quite incapable of analysing his own sensations during flight, wholly absorbed as his faculties must necessarily be in the supervision and management of his machine, and being ardently desirous to be able to make a choice of those two contradictory opinions, I determined at the time of my attachment as assistant physician to the Epinal centre of military aviation (summer of 1914) to take a flight as passenger. This fascinating experiment was repeated till I felt satisfied that I had accumulated a convincing series of data; and the reader will now, I trust, allow me to draw his attention to the resulting impressions—derived from sixteen ascents of variable duration, and reaching an altitude of 2,500 metres from the ground (= 2,850 m. above the level of the sea).

(1) *Subjective Study.*—During the stage of ascent—and varying with the velocity—the process of adaptation (slow or rapid) of the organism to the circumambient medium is punctuated by the development of various physiological troubles, which appear in irregularly serial order at variable planes of altitude. These, being often insignificant and transitory, may in many instances have escaped the notice of aviators who had not been warned of their occurrence. Of the serial items the principal are the following:—Headache, which frequently appears on passing beyond an altitude of 1,500 m. (Blériot), 2,000 (Farman); some *tinnitus aurium* at the same altitude—especially when the motor is placed behind the seat (M. Farman, for example), or when it is not rotatory; increasing difficulty of inspiration—associated with increased facility of expiration in the rarefied air; rapidity and tenuity of the pulse, according to the increase of altitude attained.

Those various unpleasant sensations seem to undergo a slight degree of attenuation on entering the horizontal plane of flight at the highest altitude attained. Nevertheless, when any disturbing incidents occur, such as results from the incidence of eddying currents, some slight repetition of the respiratory or cardiac troubles will be found to supervene—of emotional or reflex origin; subsidence, however, soon follows.

The descent is found to be productive of various sensations, which prove to be more sharply defined in proportion to the velocity and the degree of agitation during its course. The cephalalgia disappears—but at an altitude somewhat below that of its original onset. The respiratory movements return by degrees to their normal rhythm, the pulse becomes slower with a more vigorous stroke—although more gradually, as will be seen afterwards. On the other hand, the tinnitus aurium undergoes but a slight degree of subsidence, and persists even after reaching the ground for a period of which the duration varies with the form and situation of the motor (three to four hours when the motors are fixed at the back; half to one hour when the rotatory apparatus is arranged in front of the aviator). I can speak only from memory of the auriculo-tympanic shock produced by the act of deglutition during the course of the descent. It results, of course, from the brusque re-establishment of equality of pressure on the two faces of the tympanic membrane. The same factor also accounts for the disappearance of the painful sensation of throbbing strokes, in salvoes which synchronise with the pulse, and for the re-appearance of a clearer audition. When the descent is carried out in spirals of short radius and deep grades of descent, the machine being steeply inclined, palpitation of the heart sometimes appears which is apparently of emotional origin. In a case of this kind, I experienced two consecutive swoonings, which I had besides sought to provoke by watching successively the extremities of the two wings. They were of short duration, and disappeared when I was able to raise my eyes to the sky, and were reproduced during the course of other flights only under corresponding circumstances.

After returning to earth, a very obvious degree of nervous excitation succeeds the auricular tension and the other above-mentioned phenomena, which disappear pretty rapidly. This new development manifests itself:—

(*a*) Psychically, by a feeling of intense satisfaction, and one of enchantment of the voyage.

(*b*) In the sensory-motor apparatus, by a slight trembling of the extremities and muscular fibrillations (with frequently an impossibility of realising the amplitude with Dr. Pachon's oscillometer, in the case of pilots who have just returned to earth); by a slight degree of inco-ordination of muscular movements, which seem to be uncertain and wanting in precision; and by a sensation of great lightness during the descent of the machine, sometimes accompanied by a sensation of titubation which rapidly disappears.

(*c*) In the cardio-vascular system, by flutterings of

the heart which quickly become calmed down; local congestions which are specially discernible on the face, notably in the eyes, the conjunctival membranes being markedly injected. I have never seen a development of nystagmus.

(*d*) In their other physiological apparatus, by an urgent desire to micturate, which often leads to a merely negative result; and by a distinct increase of appetite. All those phenomena disappear pretty rapidly, to be succeeded by a restorative sleep, which is profound in the majority of instances.

The question must now be discussed: In what proportion of other aviators have I met with those, the principal, sensations experienced by myself? Even if we can positively assure ourselves that all the passengers who have passed to a higher altitude than 1,500 m. in their respective first flights—a figure which, of course, increases with the progress of their training—have been affected at some period of their initial flight, we cannot calculate the proportion of pilots who feel corresponding symptoms at a proportion higher than 50 per cent. Among these, in fact, after every suggestion of the influence of *amour-propre* has been set aside, the inquiry is always one of the most delicate nature. Not merely the element of juniority, the element of variety of individual temperament counts for a great deal—inasmuch as the subjects of a nervous type are more sensitive than the apathetic. On the other hand, too, we have the facts that methodical training in regard to the duration and the altitude of flights; and also the degree of tranquillity, regularity and velocity—are all, individually and collectively, factors of importance in the training of each; and the gradual process of accustoming the candidate to the conditions and demands of his new vocation. The habitual use of one apparatus is also a factor of which the importance must be emphasised; and among numerous is the following typical example, observed by myself, which I here present to the reader: A certain biplane pilot, when flying as a passenger with a thoroughly expert monoplanist, experienced—after a flight of half an hour at an altitude of 1,800 m., followed by a rapid descent—a series of novel sensations which he had never felt before.

II.—*Objective or Experimental Study.*—It was interesting to trace in the variations of arterial tension and of the pulse rate, at the different altitudes attained with more or less rapidity, an explanation of the physiological modification above referred to. I first undertook this investigation on two-seated machines, on the persons of some devoted pilots, but in the majority of instances the observations were made on my own person; and I trust that the reader will be able to bear with me while I lay before him a series of results which are inevitably much too personal.

A.—PULSE.—(*a*) On the Farman biplane (1913 model) and the Blériot monoplane, I counted my pulse at the entrance of each stage of 250 m., and have drawn the following general conclusions from the data so obtained: The number of pulsations per minute increases in proportion to the ascent with, upon the whole, approximate regularity. There is, of course, nothing surprising in this fact, since the strata of air traversed in the upward movement became gradually rarer and colder. This process of acceleration was at first very pronounced, from 0 to 750 m., appeared to subside from 750 m. to 1,250 m.; beyond the latter altitude it increased again and with greater rapidity. This result is explained by the fact that between the planes of 750 m. and 1,250 m. altitude, the air is usually more calm than in the inferior strata, while the wind is there more regular, the eddies are less numerous and always less sensible. Beyond the latter altitude, with a wind current which is very often stronger, the degree of cold is above all a powerful factor in the new acceleration. On the other hand, I also noticed that every time the machine was roughly shaken by strong eddies, the pulse underwent a brusque acceleration, and again slowed down as soon as calm became re-established. A comparison of the results of my observations has also demonstrated the fact that, for the same altitude, the increase in the number of pulsations per minute was more pronounced in the ascents of a Farman than in those of Blériot.

MEAN DIFFERENCES.

Altitude between 0 and 1,000, Farman=17, Blériot=14.

Altitude between 0 and 1,500, Farman=27, Blériot=19.

As the Blériot ascended more rapidly than the Farman, the question here suggests itself: Did the heart experience a certain stage of retardation before accommodating itself to the environment of the new altitude which had been more rapidly reached?

(*b*) During the ascent to the maximal altitudes reached the pulse did not vary; and, as has often happened to me in a Blériot, very sloping evolutions during ascent—so-called Russian mountain exercises—produced no derangement of its rhythm.

(*c*) At the beginning of the descent, there appeared to develop, during an extremely short interval, a new period of acceleration; this was doubtless due to the slight degree of emotion provoked by the sudden cessation of the bruit of the motor, combined with the fact that the machine dived sharply at the same time. After this, the frequency diminished in regular progression, especially when the descent took place gradually and without any jerking movements. If the process was varied by very oblique elevations brusquely effected, shocks due to meeting with eddying currents (Obs. 9), the appearance of vertigo (Obs. 6: 2 slight successive swoonings taking place in the course of a rapid descent in spiral curves), glissades on the wing (Obs. 5: 2 glissades of about 100 m.)—a resulting acceleration was noticeable; of very short duration indeed, but sharply defined nevertheless. And after reaching the ground, the degree of diminution of the pulse-rate was less than that following a normal descent from the same altitude. Thus the degree of difference between the pulse-rate at the time of starting and that following the return to earth was more pronounced (Obs. 4: D=8; Obs. 5: D=14). As the experience of M. Cruchet had previously recorded, I always found the pulse-rate more rapid after the conclusion of a flight than it had been previous to the ascent; whether that had been carried out with regular gradation or been accompanied with acrobatic exercises (rising from 90 to 130 at the end of a quarter-hour's flight at an altitude of 800 m.).

Then another interesting fact must here be also noted: as the altitude reached increases during the ascent, the radial pulse becomes less perceptible, and becomes soft and unequal, while still retaining its regularity of rhythm. I have not, of course, been able to materialise those shades of distinction, inasmuch as any attempts at obtaining records by direct sphygmography or cardiography were out of the question—not only from the currents due to the velocity of the machine and the vibrations of the motor, but also from the difficulty of adjusting the inscribing style and maintaining its position in continuous contact with the registering cylinder, as well as that of the button on the radial artery.

B.—*Study of the Arterial Tension.*—The extreme readiness with which Pachon's sphyg-

momanometer lends itself to manipulation —the oscillations being but slightly disturbed by the vibrations of the air-plane —has enabled me to follow the variations of arterial pressure, both by itself and in association with those of the pulse-rate (Obs. 1 and 7), and during the respective stages of ascent (record taken every 250 m.) and descent.

(1) The graphic tracings thus obtained proved to be similar in all the cases, notwithstanding the fact that they were taken on various machines. A cursory examination of the tracings was then found to show that the curves of maximum and minimum pressure seemed to form the outline limits of an irregular spindle, the expanded portion of which corresponded to the maximum altitude attained, and of which the cone corresponding to the descent displayed a more rapid movement than that of the ascent. The question now suggests itself: Would there develop, in proportion to the altitude reached, a degree of more complete utilisation of the work of the heart—resulting from the diminished pressure exercised on the whole organism—with the effect of a facilitated systolic amplification of the general arterial system, especially throughout its peripheral segment, followed by a more complete cardiac depletion at each diastole? Or would the increased frequency of the cardiac movements explain by their associated phenomena of repeated excitation, and the integrated summation of the effects of the same, the increased amplitude and wider area of utilisation of the cardiac revolutions?

During the descent, which is always effected at a velocity greater than that of the ascent, the organism passes successively through strata of air of continuously increasing density. And, notwithstanding the persistent acceleration of the pulse, the range of separation, between the maximum pressure which goes on decreasing and the minimum pressure which goes on increasing, diminishes still more rapidly.

Another question here arises: Does the cardiac systole tend to diminish in vigour when it follows a cardio-vascular diastole of progressively increasing incompleteness? Or, would its normal effects be less vigorously sustained by the failing elasticity and retractility of the muscular tunics of the arteries? Would these also form the first symptoms of a cardio-vascular fatigue produced by the rapid descent?

(2) A detailed study of my tracings displayed the following data:—

A.—ASCENT.

Duration of Ascent.

Machine: Farman ... Obs. 1 40 min.
,, ,, ... Obs. 2 35 ,,
,, Blériot ... Obs. 7 30 ,,

Increase of Pressure Maxima.

Between 0 and 2,000 = + ½ cm.
,, 0 and 1,750 = 0
,, 0 and 2,000 = 0

Diminution of Pressure Maxima.

Between 0 and 2,000 = — 1¼ cm.
,, 0 and 1,750 = — 1 cm.
,, 0 and 2,000 = — 1½ cm.

(1) The *pressure maximum* diminishes, at first, to a height of from 300 to 500 m. On passing beyond that elevation, the pressure displays a tendency to increase slowly and regularly, till it becomes equal or slightly superior to that recorded at the start.

(2) The *pressure minimum* diminishes continuously, rather rapidly from 0 to 500 m., and then less quickly. The diminution is more important, in every case, than the corresponding increase of the pressure maximum.

Duration of Descent.

Farman: Obs. 1 4 m. 48 s.
Farman: Obs. 2 3 m. 30 s. or 3 m. 48 s. [time at 2,000]
Blériot: Obs. 3 3 m. 10 s.

Diminution of Pressure Maxima.

From 2,000 to 0 = — 1¼ cm.
,, 1,750 to 0 = — 1 cm.
,, 2,000 to 0 = — 1¼ cm.

Increase of Pressure Maxima.

From 2,000 to 0 = + 1½ cm.
,, 1,750 to 0 = + 1¼ cm.
,, 2,000 to 0 = + 2 cm.

(1) Thus, the diminution of *pressure maxima* appears to become greater as the velocity of the descent is more rapid.

(2) The increase of the *pressure minima* appears to become greater as the velocity of descent is more rapid. This increase is, in every case, more important than the corresponding diminution of the pressure maxima.

Constant or Mean Pressure.—The study of this is easy:—

Duration of Ascent.

Farman: Obs. 1 40 m.
Farman: Obs. 2 35 m.
Blériot: Obs. 7 30 m.

Diminution of Mean Pressure.

From 0 to 2,000 = — ½ cm.
,, 0 to 1,750 = — ¾ cm.
,, 0 to 2,000 = — ¾ cm.

Duration of Descent.

4 m. 48 s.
3 m. 30 s. [3 m. 48 s. to 2,000]
3 m. 10 s.

Increase of Mean Pressure.

From 2,000 to 0 = + ¼ cm.
,, 1,750 to 0 = + ¼ cm.
,, 2,000 to 0 = + ¼ cm.

(1) It is thus seen that it tends to diminish regularly during the period of the ascent; this diminution being more pronounced as the ascent takes place more rapidly (we know that during that period the pulse-rate continues to increase: the normal physiological association).

(2) During the descent it tends to increase. Nevertheless, the numerical equivalence of its increase at various periods does not enable us to make this augmentation a function of the time, and we cannot draw a definite conclusion therefrom. Then if specially a function of the altitude, should the gain be the same in Obs. 2 (at 1,750 m.) as in Obs. 1 and 7 (at 2,000)?

(3) *Collective Influence of an Ascent.*—What are the general modifications which an ascent in an air-plane can produce in an organism, of maximum, minimum, and mean pressure respectively?

A comparison of the measurements made at the respective times of starting and landing, and in the conditions most favourable to exactitude, furnishes the following results from cases of simple flights, of medium altitude and duration:—

		Flight.	
		Duration.	Altitude.
Farman:	Obs. 1	44 m. 48 s.	2,000 m.
Farman:	Obs. 2	38 m. 30 s.	1,750 m.
Blériot:	Obs. 7	33 m. 10 s.	2,000 m.

Diminution of Maximum Pressure.	Increase of Minimum Pressure.	Diminution of Mean Pressure.
— ¾ cm.	+ ¼ cm.	— ¼ cm.
— 1 cm.	+ ¼ cm.	— ½ cm.
— 1¼ cm.	+ ½ cm.	— ½ cm.

(*a*) Accordingly, there is a diminution of the maximum pressure, of a degree more marked as the flight has been of greater velocity: during the ascent and—more especially—during the descent.

(*b*) Increase of the minimum pressure under the same conditions.

(*c*) In all the cases there was diminution of the constant or mean pressure, and of the same order. (*a*)

Conclusion.—An ascent in an air-plane leaves after it a condition of arterial hypotension; and this is the more clearly marked as the ascent and, more especially, the descent have been more rapid. On the other hand, being called upon to adapt its systolic effort rapidly to circumambient circumstances, which are essentially and constantly changing, the cardio-vascular apparatus becomes quickly fatigued. This fatigue of helping to bring about at an early stage a degree of lassitude quite disproportionate to the amount of effort expended, as is observed in pilots after their circuits (who are sometimes found fast asleep near their machines in the open country). Why should we not attribute to the development of a certain degree of cerebral anæmia—the causation of which is referrible to two factors of clearly associated influence, cardio-vascular fatigue and arterial hypotension—the onset of those sensations of somnolence, fainting, and vertigo which are sometimes experienced by aviators, and referred, perhaps too hastily, to modifications of auricular tension: unequal degrees of pressure on the two faces of the tympanic membrane, hypertension within the labyrinth, or modifications in the conditions of the semi-circular canals? Should we not have also thus furnished a rational explanation of certain grave accidents of aviation, such as have occurred after rapid descents from places of very high altitudes (C—, after his crossing the Alps)? From these considerations, I regard it as highly necessary to advise all aviators to fly at a tranquil pace, and not fly too rapidly from one altitude to another. Not only will he avoid the development of the various forms of malaise referred to in the course of this communication, but he will also escape the fatigue of his cardio-vascular system, which tends to recur more rapidly with the frequent succession of flights; and, more especially, when such ascents, and more especially descents, have been effected too rapidly.

Then, on the other hand, in making choice of pilot pupils—putting aside all questions of candidates affected with any organic lesion of the heart, however slight, who should be systematically refused in every instance—it would be well to exercise a rigorous selection among those cases in which any visceral defect or diathetic blemish predisposes too easily to abrupt modifications of the circulatory *régime*.

MRS. HARRIET HARRIS, of Hackney, left estate of the gross value of £10,428, of which £10,262 is net personalty. She left the residue of her estate, subject to a few legacies and bequests, in equal shares to the Queen's Hospital for Children, Hackney, the Hackney Benevolent and Pension Society, the King's Nursing Home, and the Home and School for the Blind, Upper Clapton.

DR. ABRAHAM CROSS GODFREY, M.D., of Broom Hill, Dripsey, Co. Cork, formerly of Freemantle, Hants, late physician to the Southampton Dispensary, whose estate is valued at £48,365, left £1.000 each to the South Hants Hospital and the South Infirmary, Cork.

(*a*) Identical results were obtained in the cases of the pilots. As a typical case I may cite the hypotension of 0.25 c.m. in case of the aviator P. after a short ascent.

	Before	After.
Mean pressure = 12.5 cm	{ 16 cm.= P. max.=15 cm. } { 9 cm.= P. min.=9.5 cm. }	12.25 cm. Mean pressure.

ORIGINAL PAPERS.

SOME POINTS IN CONNECTION WITH PUERPERAL ECLAMPSIA.*

BY SIR WILLIAM SMYLY, M.D., F.R.C.P.

THE first point I wish to consider is what is puerperal eclampsia? How can it be defined. What does it include and exclude? The word eclampsia was, I believe, employed by Hippocrates, and signifies a lightning flash. Some say that it is derived from another Greek word which means to trick out. But to one like myself unlearned in the Greek language, and unfamiliar with the writings of Hippocrates, the origin of the word is of little interest. What does, however, seem to me to be of great importance is that when I use a word it should convey some fixed idea to those to whom I am speaking. Now, in general use, the word eclampsia is simply a synonym for convulsions, and in obstetric literature up to the latter years of the last century it signified convulsions occurring in a woman before, during or after delivery. But in 1893, Schmorl, and in 1895 Lubarsch published their epoch-making investigations into the pathological anatomy of puerperal eclampsia, and since that time the term has been used by obstetricians in a more restricted and technical sense, limiting its employment to those cases in which certain definite pathological conditions exist. When these conditions are present the case is one of eclampsia, even though the patient has no fits; and when they are absent it is not eclampsia, even though she may have convulsions. We now describe certain cases in which the patients became comatose and died, as eclampsia without convulsions, and others in which fits were due to uræmia, epilepsy, or other causes as convulsions, which were not eclamptic.

There is a condition which generally precedes convulsions, characterised by certain well-known symptoms: œdema, especially of the hands and face; diminished excretion of urine, associated with headache, nausea and vomiting. The urine on examination is found to contain albumin tube casts, renal epithelium, white, and sometimes red, blood cells. As the disease progresses towards its culmination in convulsions the patient complains of disordered vision and hearing, spots and splashes before the eyes, and, in some cases, complete blindness. The visual disturbance is generally associated with important anatomical changes in the eyes, such as retinitis and separation of the retina. A violent pain in the stomach is also not an infrequent symptom, and is generally a kind of aura ushering in a convulsion. Another symptom of great importance is a considerable rise in the blood pressure. In the text-books the condition I have here described is called either the pre-eclamptic state or toxæmia—both, in my opinion, bad and misleading terms. My objection to the first is that it suggests that the symptoms are merely a warning of danger to come, whereas they are in fact due to an actually existing and very serious disease which does not invariably, or even in the majority of cases, end in convulsions, and therefore the term pre-eclamptic appears to me to be wrong. The alternative term, toxæmia, is even worse, because it assumes what, though probably true, has never been established as fact, that the condition is due to a poison or poisons in the system. In my opinion these cases, whether they present the symptoms of the pre-eclamptic condition, convulsions, or coma without convulsions, are all examples of one and the same disease, and should be grouped under one name, whether it be

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eclampsia or some new and better term. As far as we know at present, the essential facts connected with eclampsia are that it is met with only in women in the puerperal state or in the newly-born infants of eclamptic women. The blood is much thicker than normal, of high specific gravity, and contains, as Kollman discovered in 1897, an abnormal amount of fibrin, and, as Schmorl pointed out, a special tendency to coagulate in the blood-vessels. The anatomical changes found throughout the body after death by Schmorl and Lubarsch, appear to have been caused chiefly by this coagulation in the capillaries and the consequent necrosis and hæmorrhages into the tissues supplied by them.

The Kidneys showed thrombi in the veins and arteries of the small vessels, especially in the glomeruli with degenerative changes and necrosis of the tissues, especially of the secretory epithelium.

The Liver.—Thrombosis of the vessels with hæmorrhage and anæmic necrosis.

The Brain.—Thrombosis of minute vessels, with softening and minute hæmorrhages.

The Heart.—Thrombosis of vessels and muscular degeneration.

The Lungs.—Thrombosis and fatty emboli with hæmorrhages.

The same formation of thrombi with necrosis and hæmorrhages were found in all parts of the body, and are now generally accepted as the essential features of the disease; where they occur the case is one of eclampsia, and otherwise it is not. The hæmorrhages are usually minute petechiæ, but occasionally they are very extensive, and even cause death. We have long been familiar with apoplectic convulsions—that is, convulsions complicated by cerebral apoplexy—and I have seen very large effusions under the skin and into serous cavities, and I have no doubt that some at least of the cases of so-called accidental hæmorrhage are due to this disease. This opinion is founded upon the well-known fact that accidental hæmorrhage is generally associated with albuminuria, and also upon cases of which the following may serve as examples.

The first I have taken from Dr. Jellett's reports of the Rotunda Hospital. She was admitted on January 9, 1911, with a history of three eclamptic fits before admission. She had another fit after admission, and the usual treatment was carried out. Shortly after this she became collapsed, and respiration ceased. It was thought at the time, as I think very probably happened, that she had had another fit, and that respiration ceased during it. Her pulse rapidly became worse, and finally became imperceptible. Artificial respiration was performed, and stimulants, etc., administered without result, and it gradually became apparent that she was dead. *Post-mortem.*—Cæsarean section was performed as a chance of saving the child. On opening the abdomen it was found to contain sufficient blood to account for her rapid death. The blood had come from a ruptured mesenteric vein.

The second case was admitted to the Rotunda Hospital in March, 1915, under Dr. Tweedy's care. She was pregnant about seven months. Her face, legs and thighs were œdematous. She complained of intense headache, dimness of vision and vomiting; secreted very little urine, which contained numerous tube casts and became almost solid when boiled. The blood-pressure was 200 mm. hg.—in fact, a typical example of the pre-eclamptic state. The usual treatment was adopted, including purgatives and diuretics. All food was stopped, but she was allowed water *ad libitum*. Under this treatment she appeared to improve, but at the end of a week she suddenly complained of violent abdominal pain. A bloody discharge, which at first was slight but gradually increased to a considerable hæmorrhage, escaped from the vulva; to check it the vagina was plugged, but though the external hæmorrhage was controlled her general condition grew steadily worse. The face became pale and cold, the features pinched, and her pulse rose steadily to 100 beats per minute. The abdomen appeared to be more distended, and the uterus was tender to pressure. The diagnosis was internal accidental hæmorrhage, and it was decided to extirpate the uterus as the only chance of saving the woman's life. On opening the abdomen, a considerable quantity of free blood was found in its cavity, the source of which was discovered in the right broad ligament, and a ligature thrown round the ovarian vessels on that side completely prevented all further loss. The blood already effused having been removed the wound was closed; the uterus not being removed. The patient made a complete recovery, and left the hospital in good health.

The third case came under my own care in December last. She had previously borne two children, one 12 and the other 10½ years ago. She was brought to me by Dr. Cecil Brew, of Bray, who informed me that he had first noticed toxæmic symptoms ten days previously, and that since that time she had been kept on an exclusively milk diet, but was steadily getting worse. When I saw her she had general anasarca, with puffy face and swollen eyelids, and the urine became almost solid when boiled with nitric acid. I ordered her to be confined to bed, gave her a cathartic mixture, reduced the milk to one pint in twenty-four hours, but allowed her to drink as much water as she desired. On the 29th, two days after, her condition was unaltered, her blood-pressure was 250 mm. h.g., and she passed 40 ounces of urine in twenty-four hours. I then stopped the milk altogether, but continued the water, and also allowed two teacupfuls of tea partly as a placebo and partly as a diuretic, and also some lemonade made with fresh lemons, which is supposed to favour the development of ante-thrombosis. From this time she appeared to improve steadily, the blood-pressure fell gradually, until, on January 12th, it measured 165 mm. The amount of urine excreted in twenty-four hours increased to about 60 ounces, and the albumin decreased very considerably. In a specimen examined by Dr. Earl on the 14th he reported only one part in a thousand, and very few tube casts. The anasarca had entirely disappeared, and all her other symptoms had so markedly improved that I yielded to her earnest entreaty, and allowed her to go home. But only a short time afterwards Dr. Brew telephoned to me that there was some hæmorrhage, and that he would bring her into town at once. About half an hour later, on arrival at the nursing home, I found her weak and anæmic, but there was then no external hæmorrhage. Her general condition, however, became rapidly worse, and she fainted. On palpation the uterus felt hard and firm, and I could distinguish no fœtal parts. There was evidently serious internal hæmorrhage, the symptoms indicating shock and loss of blood. To my great joy strong labour soon set in, and a dead infant, the placenta, and a large quantity of blood and liquor amnii were all expelled together. Pituitary extract was injected, and brandy and other restoratives administered, and as the uterus contracted firmly and there was no more hæmorrhage she gradually recovered, and has since gone on well. I think that in this case the premature detachment of the placenta was most certainly due to the disease of the mother, and I further hold that the disease was the same in all the three, though under the present nomenclature the first would be

classed under eclampsia, the second under toxæmia, and the third under accidental hæmorrhage.

The last point in connection with eclampsia to which I wish to refer is high arterial tension. It is an invariable symptom in this disease and the cause of some of its fatal complications, such as heart failure and effusion of blood. My attention was especially called to it by a case that I saw some months ago in consultation with Dr. Gibson. The patient was a primipara towards the end of pregnancy, who had albuminuria with other symptoms of the pre-eclamptic condition. These symptoms had been steadily growing worse in spite of her having been restricted to water for some days. Her urine was not only albuminous, but the chemical and microscopical examination pointed to serious degeneration of the kidneys. But what Dr. Gibson laid especial emphasis upon was that her blood-pressure measured 185 mm. h.g. We agreed that the pregnancy should be terminated without delay, and that the safest method under the circumstances would be Cæsarean section. That operation was accordingly performed by Dr. Gibson, with satisfactory results to both mother and child.

In this case I concurred with Dr. Gibson's views, because of the general symptoms and the history of the case, and was not at all influenced by the high blood pressure, about which I confess I knew very little. I did know that a high blood-pressure was a very constant symptom in eclampsia, and that 185 mm. hg. was a high blood-pressure. But whether it was unusually high in such cases, or what its prognostic value might be, I do not know, nor have I found much information upon the subject in obstetric literature. I therefore determined to utilise the opportunity which my present connection with the Rotunda Hospital affords to study it for myself. We had during the past year in the hospital thirteen cases of this disease, six of which were complicated with convulsions. In all the cases in which it was measured the blood pressure was very high, often up to 200 mm., and in some as high as 270 mm., but all recovered under the usual treatment systematised by Dr. Tweedy. A very high blood-pressure is not, therefore, a fatal complication, nor does it indicate the necessity for Cæsarean section. It is, however, one of the most important features in this disease, and one which requires most careful observation and treatment. Its reduction may be attempted in three ways. Firstly, by starvation combined with callioresis and diuresis. This was the method which we adopted with success in all our cases.

Another method for reduction of blood-pressure is by giving veratrium viride, but I have no personal experience of it.

The third method, and probably the most rapidly effective, is bleeding. This was the sheet anchor in the treatment of eclampsia by our forefathers, and was, in my opinion, abandoned upon insufficient grounds. Of late years it has again come very much into favour. Dr. Jardine practices it as a routine in all cases, and many excellent authorities in the United States, France and Germany most confidently recommend it. Commandeur, for example, declared that it was the most important remedy at our disposal, and Lichtenstein endeavoured to prove by statistics that all the benefits claimed for operations were due to the attendant hæmorrhage. In his tables he showed that after operative delivery convulsions ceased in one-third of the cases, and that those were the cases which had lost most blood. I myself believe that it benefits the patient not only by reducing the pressure but also by thinning the blood. We have not, however, bled any of our patients in the Rotunda.

My object in making this communication has not been to deal comprehensively with the subject of eclampsia, but rather to call attention to three points connected with it: Firstly that the pre-eclamptic state, convulsion, and coma without convulsions, are essentially one and the same disease, and should have one name. Secondly, to emphasise the connection between this disease and some cases of accidental hæmorrhage; and thirdly, to excite an interest in the study of the high blood-pressure in those cases, especially with regard to diagnosis, prognosis and treatment.

CARDIAC DISEASES AND DISORDERS IN WARFARE.

By CAREY COOMBS, M.D., M.R.C.P.LOND.,
Capt., R.A.M.C.(T.F.), 2nd Southern General Hospital, attached No. 32 General Hospital, British Expeditionary Force.

THE stress of work at the Southmead section of the 2nd Southern General Hospital has prevented any systematic investigation into the cardiac disturbances and lesions that have been encountered. Nevertheless, it may be worth while to report the most definite impressions that these matters have made on my mind.

First, there have been a fair number of cases of frank organic disease of the heart. I recollect but one example of the renal heart, in a man of about forty. His kidney lesion was obscure, and probably of long standing. His symptoms were cardiac, and it was on this score that he was invalided out. My own cases have only included one or two possible instances of cardiac syphilis, in the form of aortic valvular disease with some diffuse dilatation of the aorta. I have seen no case of aneurysm, though I believe one or two examples have been through the wards. Of post-rheumatic cases there have been quite a number. Many of these were obviously of long standing, but a few are traceable to rheumatic infection acquired, or at least manifested since the outbreak of war. With one or two exceptions they have been cases of moderate severity showing only a little enlargement of the heart and some mitral incompetence. The rheumatic group has also included several men with signs of aortic incompetence, and a few with evidence of mitral stenosis. I have seen no case of organic disease which can be directly traced to pure overstrain.

It might seem easy, at first sight, to decide what to do with these men. Anyone with organic disease should, it may seem, be discharged forthwith from the army. But since the prime consideration is whether or no the man is of most value to his country in the army or out of it, the problem is not quite so easy as it looks. Obviously men with pronounced cardiosclerosis associated with high tension are unfit for any kind of military service, and the same is true of cardiac syphilis. In both symptoms are almost sure to get worse quickly, and the man will become useless to the army, whereas he is still fit for years of work at home. In cases of rheumatic origin, most men with pronounced valvular lesions are of more service to their country out of the army than in it. Occasionally one meets with a case of aortic regurgitation or of mitral stenosis in a man who may be usefully employed at home in training recruits, or even in general home service. In arriving at such a decision as this, one is naturally influenced by the man's age, his term of service, and to some extent by his own inclinations in the matter. It is in patients with little or no dilata-

tion of the heart, and a mere systolic bruit at the apex, that most of the difficulties arise. Many of these men improve considerably in hospital. Those who have no symptoms, whose lesion is found accidentally, may be safely returned to duty. For others, who complain of dyspnœa on exertion, and in whom there is manifest cardiac enlargement, home service may be at least tried. The chief point is that no man should be discharged merely because he has *signs* of cardiac disease; *symptoms* are more significant than signs. Each case must be judged on its merits.

* * * *

A much larger group of cases consists of those who fall for the most part under the heading of "D.A.H." We have seen a great many of these, far more than in civil practice. Unfortunately, I have been able to get at my notes on only twenty-five examples of this syndrome. With these as a basis I will briefly describe the condition which they exemplify.

Ætiology.—The average age was 24, 76 per cent. of the men being 25 or under. A similar percentage was derived from infantry units. More often than not the patients are of slender physique. Various causes were assigned by the men themselves. Several had felt symptoms during training. In one or two some special effort or exertion was blamed, while others thought it was the outcome of the general stress, physical and emotional, to which they had been exposed. Here it may be remarked that the cases are more frequently met with among the Gallipoli men than among those from Flanders. In two cases the onset was directly attributable to shell shock, and in two others it was as certainly consequent on a wound. One man thinks his symptoms are due to excessive smoking during convalescence. This tobacco factor is not by any means discoverable in all cases. Yet it seems to me that many of these men, or boys, as some of them are still, are smoking too much in hospital. Finally, the symptoms appeared in some cases during convalescence from some acute infection, such as dysentery, from typhoid fever, or malaria. Some of the men seem to me to owe a fraction of their subjective discomforts to the attention which they bestow on their hearts after they have been told—unwisely as I think—that something is wrong with the heart.

Pathogenesis.—In the absence of any direct anatomical evidence, such data as are at present available must be pieced together. To begin with, there is no evidence in any of the cases I have seen of structural alteration in the heart itself, except of a mild, general dilatation, which—in some, at any rate—appears to be transient. On the other hand, there are distinct indications of a nervous or supracardiac origin. (1) The origin of the symptoms is often traceable to nervous shock or stress. (2) The pulse acceleration, which is so characteristic a feature of the syndrome, is subject in a majority to nervous excitation. (3) Certain of the more prominent physical signs, as will be shown below, are those associated in civil practice with states of nervous excitement. (4) The condition we are describing is often associated with other manifestations of an exhaustion neurosis. Of course, it is possible that there may be an intermediate toxic or even bacterial factor, and that nervous stress merely liberates some toxin or permits of some infection by which the symptoms are immediately provoked. Even so, however, the nervous factor is by far the more important.

Symptoms.—The onset may be abrupt, and traceable to some definite event; or gradual, even coming on during rest in hospital or convalescent camp. There are three chief symptoms, dyspnœa with exertion or excitement, palpitation, pain or other forms of cardiac discomfort, also increased by nervous or physical stress, and giddiness. Headaches and sleeplessness are also complained of by some. In a few the hands are cold and blue, but this is by no means universal. In many cases there are no subjective symptoms. If a number of wounded, or convalescents from dysentery, be examined, the irritable pulse and other characteristic features of the syndrome are found in quite a large percentage.

The pulse variations constitute the most remarkable and constant feature of these cases. These variations may be noted under three headings: (1) The average rate is quicker than normal (over 80 per minute in over 80 per cent. of the cases). (2) The rate of the pulse varies widely from day to day, and even from minute to minute. The ward charts show this. In one of my cases the rates charted varied from 80 to 136, in another from 72 to 100, from 56 to 92 in a third, and so on. (3) The pulse is accelerated with notable readiness by comparatively trivial physical and psychical stimuli. The physical stimulus most easily applied is a change of posture. In one of my cases the following remarkable variations were recorded. The rate while the patient lay flat in bed was 132 per minute. When he sat up the rate increased at once to 156 and stayed at this rate for at least two minutes. When he stood up by the side of the bed it increased to 192 per minute, and a true alternation of beats became apparent, together with pallor and giddiness. For several minutes after he lay down again this high speed persisted. This is an extreme case, but the same increase of pulse rate with alteration in posture, persisting abnormally, is highly characteristic. Emotional or psychic stimuli are rather more difficult to improvise. The patients are, nevertheless, well aware of the fact that excitement causes a notable increase in the rate of the heart. One curious example of this is to be found in the fact that the pulse rate as measured by the medical officer during his round is invariably faster than the average rate in the chart—the interpretation, to which the patients themselves confess, being that the medical officer, with powers of discharge to duty, to subsidiary hospital, and so on, is a more formidable person than the sister, who is responsible for the pulse rates on the chart. The pulse is often irregular also, the arrhythmia being of the "sinus" type, *i.e.*, it is due to causes operating through the supracardiac nervous mechanism, and not inherent within the heart itself. In few cases extra systoles occur.

The *physical signs* are of some interest. The apex beat is forcible and diffuse, and extends too far to the left. Sometimes also it spreads downwards into the sixth interspace. There is, in fact, an apparently "inorganic" dilatation of the ventricles. Besides this there are limits of several kinds. These may be divided into three types: (1) A systolic murmur, brushing in quality, heard over a limited area, with its centre at or near the apex beat. This varies little with posture and respiration, but disappears after days, weeks or months. (2) A cardio-respiratory bruit heard at

the apex, along the left border of the heart, loudest during inspiration and with the patient in the erect posture, diminishing and even disappearing when the patient lies down and also during expiration. The resultant sound heard on auscultation is comparable to an interrupted jet of air or vapour during inspiration, dying off into silence during expiration. This is a very familiar accompaniment of nervous states in civil practice. I have described it fully elsewhere, and given reasons for assigning it to a pleuro-pericardial origin. The other types of limit, (1) and (3), own, I believe, a similar source. They tend to vary from time to time as type (2) does, and they have the same "near-to-ear" quality. In type (3) the bruit is also systolic, and as in (2) varies in intensity with posture and respiration; but it is heard chiefly along the left border of the sternum, and at the pulmonic cartilage. Types (2) and (3) may be heard at the same time, or they may alternate in the same case. In all three types the bruit is apt to occur later in systole than an ordinary mitral regurgitant murmur, and it may even have a "pre-diastolic" position in the cardiac cycle, running into and overlapping the second sound. In some cases no murmurs are heard at all. The first sound at the apex is nearly always accentuated.

Diagnosis.—The one great pitfall for the unwary is the ease with which these conditions are misinterpreted as examples of organic diseases of the heart. Of the twenty-five cases spoken of here no less than seven came to us with a diagnosis of "V.D.H."—a fact of some importance in intensifying the patient's nervous instability. I have several times written down a case at the first rapid routine examination as organic, and likely to need a medical board, only to find, three or four days later, that the signs were already modified, and the condition manifestly "functional." To guard against mistakes of this kind the following points should be recollected. (1) No one should be condemned as a case of "V.D.H." on the strength of a murmur alone. To do so is an act of malpractice. (2) Every murmur should be studied in its relation to respiration, and in at least two postures, the erect and the recumbent. (3) Just as certain bruits are characteristically organic, others—such as those described above under (2) and (3) in "Diagnosis"—are characteristically "functional." (4) Often one examination is not enough. Diagnosis should be reserved till several have been made at intervals of three or four days or longer. (5) The presence of the "irritable pulse" is always suggestive of non-organic disturbance.

Prognosis.—Many of these men improve quickly in hospital. A few, however, persist in defiance of rest and all other attempts at treatment. Their ultimate fate is uncertain. Certain physicians who watched cases of the kind during the Balkan wars assert that if they are not cared for they drift into a state of permanent arterial thickening with cardiac hypertrophy. My own experience is not extensive enough in point of time to justify any statement, but it has at least shown me how obstinate and damaging to the soldier's career this condition of irritable heart may be.

Treatment.—So far I have failed to find any drug that is of use, with the possible exception of bromides. The one measure that has any effect is rest. This does not necessarily imply a long period in bed, though it is well to keep all such men in bed for a few days if possible for the sake of observation. After this, if the average pulse-rate is not over 100, they may be allowed to get up gradually so long as they do not undertake any of the heavier ward work. The great point is to allow them a very long convalescence of some weeks or even months. It is the mental rest thus secured that helps them most. If at the end of their time they have improved sufficiently, they should be discharged to home service. Patients of this kind are never fit to go straight back to the nervous and physical stress of active service at the front. In some cases it is to be feared that they will never be fit for this. After a reasonably long probation they should be discharged from the army if shortness of breath still follows on moderate exertion and excitement. They will be more useful to the country making shells than being morally and physically knocked down by them.

One word may be said as to tobacco. On active service and during convalescence these men smoke a great deal. So far as is possible this should be controlled, especially in the case of the younger soldiers.

REFERENCE.

Quart. J. Med., January, 1912, vol. v., No. 18.

THE PROMPT CURE OF GONORRHŒA: PRINCIPLES AND PRACTICAL APPLICATIONS.*

BY GEORGE A. WYETH, M.D.,

New York.

GONORRHŒA can be aborted, in the majority of cases, if seen within twenty-four hours after a purulent discharge has begun, except in primary cases. By "aborted" I mean cured within five to seven days, leaving the patient free of gonococci and all discharge, with urine clear, and able to withstand all provocative tests. Recent statistics as to the success of modern abortive methods vary widely, ranging from forty-five per cent. reported by Frank and Lewin, of Berlin, to ninety per cent, reported by Ballinger, of Atlanta. My own personal records of private practice show success in sixty per cent. of cases.

Gonorrhœa begins as a local infection and should be treated locally at the earliest possible moment. He who defers local treatment jeopardises his patient's chance of an early recovery. If progress is to be made in the cure of this condition, we must realise that, as in cancer, our best chances lie in early attack. The so-called conservative treatment, which postpones all local attention until the acute discharge has diminished, is a tacit confession that until the eleventh hour we rely upon Nature to rid the patient of gonococci. Such a procrastinating policy sacrifices the patient's most favourable opportunity of being rapidly cured by modern methods.

It is a peculiar thing that, in this country, in far too many instances, the term "abortive treatment" as used in the textbooks, appears to mean anæsthetising the urethra and the injection of some strong, highly irritating antiseptic, such as silver nitrate or mercury bichloride. Indeed, in the 1912 edition of Keyes, in the introduction to the subject of abortive treatment, I read, "In the production of chronic urethritis the abortive treatment has taken the place of the sound of our fathers." A little further on, in italics, appears, "the surest way to abort gonorrhœa is not to try to abort it." This is a very unfortunate teaching if it results in fixing in the

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mind of the physician the belief that no patient who becomes infected with gonorrhœa can be cured within a few days. Whether or not the word "abortive" correctly describes the treatment, certain it is that a large proportion of patients with acute uncomplicated gonorrhœa, if seen within twenty-four hours after a frank discharge has been established, can be cured within five or six days, except in cases of primary infection.

In primary cases the infection makes more rapid progress than in secondary and later cases for the reason that the cylindrical epithelium of the virgin urethra once attacked by the gonococcus undergoes destruction. It is never regenerated as cylindrical epithelium, but always as pavement epithelium, which is less easily penetrated by the gonococcus.

From our studies of the pathology of acute gonorrhœa we know that the first effect of the entrance of gonococci into the urethra and their lodgment in the tissues is a simple inflammation with characteristic symptoms, and that the gonococci do not penetrate the stratified squamous epithelium of the fossa navicularis, but extend by continuity to the cylindrical epithelium of the pendulous portion, where they produce more marked changes. Here the mucous membrane is swollen and loosened, and covered by many layers of pus corpuscles. The capillary blood-vessels are markedly dilated, their lumen is filled to bursting with polymorph leucocytes, and their walls—except for the wandering out of leucocytes—show no changes. One of the striking features is that the inflammatory process is not distributed evenly over the entire surface of the urethra, but is predominantly lacunar and perilacunar. Another striking feature is that gonococci seen upon the surface of the epithelium and sqeezed between the degenerated epithelial cells are practically all enclosed in the pus cells, while of those seen in the sub-epithelial spaces some are intracellular, but many more are extracellular.

Here, then, is Nature's battleground for her struggle against the invading enemy. She has dilated the blood-vessels to the utmost, and is sending forth her warriors, the leucocytes, to engulf the rapidly increasing army of gonococci by her usual means of defence, phagocytosis. The belief that the gonococcus is a parasite of polynuclear cells, in which it thrives, and that the extracellular ones are short-lived, I do not endorse. That the gonococci are found intracellularly is not due to any predilection of the gonococcus, nor is it a mere coincidence. It is a definite, specific act of Nature. If we incubate an emulsion of gonococci with washed human blood corpuscles for ten or fifteen minutes, after the method of Sir Almroth Wright, we find practically no gonococci within the leucocytes. But let us add an equal amount of fresh blood serum and incubate for a few minutes, and then we shall find the leucocytes filled with gonococci, just as happens with staphylococci, streptococci, etc. Again, gonococci are non-motile microorganisms, and it is fantastic to believe that they must depend for their existence upon some charitable leucocyte moving toward them to afford sustenance. The leucocytes that have performed their function of phagocytosis, and thereby contain gonococci, show no evidence of having been injured by the latter. Indeed, if gonococcal pus is stained with neutral red, the intracellular cocci are stained red, while the extracellular ones remain unstained. This procedure was used by Metchnikoff to demonstrate the secretion of an acid peptic fluid by the phagocytes, and the staining of the intracellular, and not the extracellular gonococci, shows similar secretion on the part of the gonorrhœal pus cells. As has been pointed out, gonococci seen on the surface of the epithelium are almost entirely intracellular, while of those below the surface in the lower strata, some are intracellular, but many others extracellular. It is evident, therefore, that the gonococci are not dependent for their existence upon the protoplasm of the polymorph leucocytes. It has been my custom to examine microscopically the discharge of every patient at every visit, and it has been my observation that the new, well-developed cases, where no evidence of phagocytosis is shown, are invariably more stubborn in yielding to treatment than cases where the gonococci are mostly intracellular. It is in the latter group of cases that I feel vaccines are indicated, for I believe that the extent of phagocytosis and the degree of the opsonic index go hand in hand in this process. Finger failed to infect patients suffering from fever and general leucocytosis, and cases of spontaneous cure have been reported in attacks of pyrexia, to say nothing of cases that Nature herself has cured.

Since in the early stages of gonorrhœa Nature's mode of fighting the gonococci is by phagocytosis, the indication in treating this disease is to employ a remedy which, first, stimulates leucocytosis; secondly, acts as a mild gonococcicide; and, thirdly, cleanses thoroughly the urethra without injury to the tissues. Thus, in the early stages, the aim is to increase the discharge, and not to check it as has been the time-honoured custom. Nothing is more positively contraindicated than the prevailing use of astringents, which, by their constricting effect upon the mucous membrane and blood-vessels, hamper rather than assist Nature's remedial processes.

In my experience, after much experimenting chemically, bacteriologically, and serologically, the indications stated above are best met by the use of Neisser's own remedy, protargol, in a 0.25 to 0.5 per cent. solution, though I also advocate the use of any mild therapeutic agent, which fulfils the indications. Protargol itself so acts upon the urethra that its injection into a normal urethra produces a discharge macroscopically and microscopically identical with that of gonorrhœa, lacking, of course, the gonococci. In a two per cent. solution, however, protargol is astringent, like most of the popular silver salts, and in this strength is to be avoided so long as gonococci are present. The use of any strong astringent injection in this condition is to be condemned, as its mode of action is distinctly contrary to Nature's, and the effect is to predispose to complications as well as to chronicity of process.

If a patient is seen within twenty-four hours after a pus discharge has begun, a microscopic examination of the pus is made. Here at the outset we can determine the prognosis with a certain degree of accuracy by the microscopical findings, for it has been my observation that cases with a profuse purulent discharge, in which the leucocytes show that they are functioning by the pus corpuscles being filled with gonococci, invariably yield more kindly to this treatment than do cases with scant discharge in which gonococci are mostly extracellular. The patient is instructed to urinate into two glasses, passing most of the urine into the first glass and the last two or three teapsoonfuls into the second glass. If this second urine is clear and the patient gives no clinical evidence of a posterior involvement or other complications, we may hope to succeed with the so-called abortive treatment. By means of a Janet-Frank syringe with a Wheeler tip, the anterior urethra is flushed with 300 to 450 c.c. of a 0.25 to 0.5 per cent. solution of protargol, depending upon the intensity of the inflammation. The head of the penis is held firmy between the thumb and first finger of the left hand, the tip of the syringe is inserted into the meatus, and the solution slowly injected

until the anterior urethra is filled. The syringe is then slightly withdrawn, and the solution is allowed to flow out. Successive flushings are continued until the whole amount of solution is used, always with care that no undue pressure is exerted, as from the use of an elevated irrigator.

A hand syringe of at least two drachms' capacity is prescribed, and the patient is instructed how to inject the urethra himself every four hours, being told first to urinate and then slowly and gently inject the solution which is to be retained in the urethra for three minutes. This procedure is to be repeated, thus making two three-minute injections every four hours. Very often after such treatment, at the patient's visit the following day, I have found that the microscope showed no gonococci. In such cases a fairly encouraging prognosis may be made. Even if a few gonococci are still to be seen, there is no reason for discouragement as to the possibility of cure within five or six days. The initial treatment is repeated, and the patient reports on the following day, though more favourable results may be expected if the patient can be seen twice daily. No internal medicine is given, and no diet regulation is attempted, beyond the advice that the patient abstain from alcohol and highly seasoned foods. Exercise should be interdicted to prevent complications, and the patient is directed to drink freely of water.

After the third day, if no gonococci are found, the frequency of the patient's injections is decreased; and after the fourth day all treatment is discontinued, although the patient is kept under observation. Should he remain free of gonococci the case is said to be aborted. If, on the other hand, not all the gonococci have been eliminated, immediate treatment is again instituted and regulated by the microscope. Though our hope may not have been realised, yet we have at least the satisfaction of knowing that we have not unduly prolonged the attack, and that by continuing the treatment we can limit the duration of the gonococcal infection to from three to six weeks instead of the usual six weeks to three months.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE CONSCIENTIOUS OBJECTOR.

To the Editor of The Medical Press and Circular.

Sir,—It is scarcely necessary to say that I do not "try to bolster up conscientious objectors." I do demand, and in good company, that the Tribunals expressly ordained to inquire into their minds should do so impartially. As the Bishop of Lincoln recently wrote to the *Times*, "the honest objector is safeguarded by the law, let him enjoy its protection." I merely echo the reasonable request of the Bishop that the law should do what it has undertaken to do. In many cases it has not done it. And its refusal to execute justice is naked Prussianism.

The more serious part of Dr. Claye Shaw's letter is its reiteration with little or no proof that "no such faculty exists as an innate knowledge of right and wrong." It requires some hardihood for Cambridgeshire to join issue with Weymouth Street, but I decline to receive Dr. Shaw's *ipse dixit*, traversing, as it does, the universal experience of the race. For the existence of conscience, in the Standard Dictionary sense, is far more than Christian dogma. I make no apology for adhering to the Dictionary. Words mean what they pass current for, and I maintain that the volumes of that work have, in this case, carried out the aim expressed on their title-page: "to give . . . in the Light of the most recent Advances in Knowledge . . . the Meaning . . . of all the Words . . . in the Speech and Literature of the English-speaking Peoples." Nay, I will make myself yet more vile in Dr. Shaw's eyes, and appeal to the Smith's Latin Dictionary of our schooldays. Therein "conscientia" is illustrated by phrases, not from the Vulgate, but from Cicero. (*Vide in loco*, meaning III.) The consciousness of Divine guidance in critical times which Socrates claimed, was very different from the "consciousness" of Dr. Shaw. The ancient poets represented the terrors of conscience under such figures as the Erinnys and the Furies, tracking down with swift and silent footsteps their guilty victims; the ancient myths had their Nemesis. All these have their modern counterparts in Tennyson's:

> ". . . silent court of justice in his breast
> Himself the judge and jury, and himself
> The Prisoner at the bar, ever condemned;
> And that drags down his life."

And to anyone who has read Dr. Paton's book, Dr. Shaw's explanation of the attitude of the cannibals is quite unconvincing. The last thing that would have occurred to Paton is that they regarded him as a *vis major*. Why, they were continually attempting the life of the *vis*, to say nothing of stealing from him and other annoyances. It was with them that the *vis major* lay, not with the missionary, and they showed in many ways that they were quite aware of the fact. The only adequate explanation lies in certain words of an older missionary: "The Gentiles, having no law, . . . show the work of the Law written in their hearts, the conscience witnessing with them, and their thoughts the meanwhile accusing, or else excusing, one another."

These words go to the root of the matter. In one way only can an adequate explanation be given of this universal phenomenon which men call conscience: that He Who made man put within him a sense of man's ultimate responsibility to his Maker. Training will modify, develop, enlighten, or darken it; the sense itself is a separate entity.

This will answer the case put by Dr. Shaw. City missionaries and others can testify that even in a child such as he describes, the sense of responsibility to a Higher Power is not entirely atrophied by years of warping and misdirection. The most remarkable instance of this is the very German nation to which Dr. Shaw alludes. "Brought up from their childhood to steal, to cheat, and to deceive," if so ordered by the state, they are manifesting in many cases, however tardily, decided doubt as to the rectitude of such conduct, as the letters found on dead German soldiers show. "That Germans as a whole will ultimately realise their national guilt is to my mind so sure that the contrary is almost inconceivable," wrote Mr. Arnold Bennett on May 13th, 1915; and although the time of figs is not yet, there are not wanting indications that his words will be fulfilled.

Moreover, there is a converse to Dr. Shaw's case. Instances have occurred during the Tribunal sessions where a parent has appeared with his son to explain that while entirely dissenting from his son's belief, he (the parent) was convinced that the belief was honest. Yet the son would have received his training from that parent.

And what of those crises in life when new sins tempt, and new virtues attract the soul? Will its response be conditioned merely by "modes of training, by emotion of fear, and by ideas of self-conservatism"? Such factors may have their

place, but they will be dominated by that volitional attitude whereby the man will embrace the lower or aspire to the higher—he will be true or false to his conscience. In other words, he will be governed by his innate knowledge and judgment of right and wrong. To which will follow either the "witness of a good conscience" or remorse, the latter being by no means proportionate to the emotion of fear. In support of this I cite from a host of modern witnesses a poet not specifically or aggressively Christian. I mean Mr. William Watson. No one who has read his verses on "Retribution" can forget the mingling of austerity and passion in the stanza following that wherein he sings how "We shape our deeds and then are shapen by them":—

"They come upon our peace with sound of weeping,
They find us though we hide in clefts and caves.
They are with us waking, they are with us sleeping,
And rend us in our graves."

It is a true word, and Mr. Watson's plummet goes farther down into the depths than Dr. Shaw's. Those emotions which we call guilt and remorse do not have their spring in training and environment, however they may be influenced by such.

I contend that a man making appeal in honest and good faith on the ground of the tremendous moral force which men call conscience, should receive what the law has promised him; and that, in the words of a recent protest by certain men of eminence, "Conscience, however mistaken, ought not to be a subject for public ridicule." To quote once more from the Bishop's letter, "the will or capacity to take an enemy's life is not the only element in good citizenship."

I am, Sir, yours truly,

Histon, Cambs., L. Gwillim Davies.
April 27th, 1916.

MEDICAL LAW REFORM.

To the Editor of The Medical Press and Circular.

Sir,—The topics discussed in my previous letters form merely parts of the great question of Medical Law Reform, and if I am to be allowed to go on it will be under that heading. By Medical Law Reform I mean amendment of existing Acts and construction of new legislation which shall suppress the trade in fraudulent quack nostrums and appliances; which shall prevent practice by quacks under the cloak of that traffic, and shall prevent unqualified pretenders from assuming titles or by the use of misleading language in their advertisements palming themselves off upon the public as educated medical men.

Quackery in every phase is merely a system of getting money under false pretences. Much of this fraud might be put an end to by the appointment of an efficient department of public prosecution. This was proved in the now leading case tried before Mr. Justice Lawrence at the Lewes Assizes about six years ago. I do not now discuss the more subtle forms of quackery, some carried on under the mask of religion; nor do I write of fraudulent quackery within the profession—happily not more than a negligible quantity—with which I may deal later. I write now of forms of fraud as coarse as the coarsest of those amenable to the Foods and Drugs Acts, the Merchandise Marks Acts, and similar statutes. The Select Committee on Patent Medicines formulated a scheme of legislation which would deal with the worst abuses of the quack nostrum trade. It recommended that a great section of this trade should be stamped out by the sale and advertising of a large number of secret remedies being forbidden by law.

The question which has been suggested as to whether the Government of a civilised State is ethically justified in taking revenue from a fraudulent trade deeply injurious to the public welfare admits surely of only one answer. Patent medicines have been taxed for many years, but since they have been for the greater part now condemned by a special Government tribunal, they are evidently not fit to be touched for revenue purposes. Unless Mr. McKenna should himself tell us that he was aware of the findings and recommendations of the Select Committee when proposing to double the previous impost, no one who knows the facts will believe it. It is almost incredible that the necessary knowledge was not imparted to him by permanent Government officials, who were examined before the Select Committee. To raise taxes from a trade in great part fraudulent is to give sanction to the worst of that trade; and when the subject of Medical Law Reform comes within the sphere of practical politics this unfortunate slip will be made the most of in obvious ways by the enemies of reform.

It would be well if Mr. McKenna's attention could be called to this deplorable business.

The Select Committee, large in number, was taken from among representative men belonging to every Party in the House, and its Report was unanimous.

After an enquiry extending over two years the Report was published in August, 1914. Its issue unfortunately synchronised with the outbreak of war, and the Report, among many other more and less urgent matters, was put aside until Parliament should resume its normal functions. The Report forms the most powerful weapon ever put into the hands of the profession for the promotion of reform, and if brought forward with proper backing at the right time, must at least force the question into the sphere of practical politics. It is possible that the task will be taken up by members of the Select Committee, but it is evidently most desirable that the medical profession should be made fully alive to the facts of the case, so that they may be able to speak with a voice the outcome of knowledge and inspired by real feeling. I would once more urge members of the profession to make themselves sufficiently acquainted with the Report of the Select Committee; its cost is only 3d. The large appended Blue Book, the "Minutes"—the evidence of witnesses verbatim, costs 6s. 7d. It is a volume which in human interest is, I am convinced, as amusing and instructive as any literary work of any class issued since it appeared, and is more than worth reading for its intrinsic qualities. The parenthetical observations which compose this letter have taken up as much space as I am entitled to to-day. I have still to finish my examination of the conduct of the newspaper Press and to discuss other topics which I have previously touched upon. With your permission I will return to these next week.

I am, Sir, yours truly,

The Old Rosery, Henry Sewill.
Earlswood Common.
April 27th, 1916.

As prices are still rising, the Metropolitan Asylums Board, which maintains consumptive cases sent by the London County Council, has increased charges by 2½ per cent. Six months ago the charges were raised 10 per cent.

A hospital has been opened under the auspices of the Order of St John of Jerusalem at 87, Eaton Square. Offers of assistance should be made to the Administrator of the hospital.

SPECIAL REPORTS.

POOR LAW PAYMENT FOR "EXPENSIVE MEDICINES."

AT a Council meeting of the Poor-Law Medical Officers' Association on April 14th, a letter was read from the Local Government Board in answer to an enquiry by the Honorary Secretary (Dr. Major Greenwood), as to whether drugs that had risen in price greatly during the war did not come under the description of "expensive medicines," and whether they should not be included among those that Boards of Guardians were required to furnish in accordance with the Circular of the Board, dated April 12th, 1865.

The following was the answer of the Board:—

Whitehall, February 24th, 1916.

Sir,—I am directed by the Local Government Board to advert to your letter of the 4th inst., and in reply to state that while they have recommended that "expensive medicines" should be supplied at the cost of Boards of Guardians, they have not issued any Regulations on the subject, and that the arrangements to be made in individual cases would depend on the terms of the agreement between the Medical Officer and the Guardians. The Guardians would no doubt be willing to take into account any case of an exceptional nature, if brought to their notice by the Medical Officer.—I am, your obedient servant,

E. A. ROWE (for Assistant Secretary).

Dr. Major Greenwood, Hon. Secretary,
Poor-Law Medical Officers' Association of
England and Wales.

The Hon. Secretary said that it was clear from this that the provision of "expensive medicines" was not compulsory on Boards of Guardians, and appeared to be only an act of grace on their part. That being so, they could not be compelled to provide the cost of drugs that had become expensive through the war. It would appear that the Guardians generally throughout the country had for many years agreed to pay the cost of certain drugs, and by raising the salaries of Medical Officers in not a few cases, during the war, had practically met the additional cost of drugs due to the war. It seemed to him that no further pressure could be put on them to do more at the present time.

The Council agreed with this, but thought that the Local Government Board ought to have made some regulation on the subject, and that a duty of this kind should be compulsory, and not merely permissive. If the recommendations in their Memorandum on the present Poor-Law Orders were carried out, all difficulties would be removed by the Guardians being obliged to find the drugs used in the treatment of their sick poor.

STATE-AIDED TREATMENT OF VENEREAL DISEASES.

MR. LONG, President of the Local Government Board, on April 14th received a deputation from the National Council for Combating Venereal Diseases, which presented a petition urging the importance of giving effect to the recommendations of the Royal Commission on Venereal Diseases, particularly as regards the provision of adequate facilities for diagnosis and treatment.

Mr. Long was accompanied by Mr. Hayes Fisher, M.P., Sir Horace Monro, Mr. F. J. Willis, Dr. Newsholme, Surgeon-General Sir A. May (Admiralty), and Colonel Barrow, R.A.M.C. (War Office).

The deputation was introduced by Lord Sydenham, President of the National Council, and it included Sir Thomas Barlow, Sir Malcolm Morris, Dr. Frederick Taylor (President of the Royal College of Physicians), Sir Rickman Godlee, Major Darwin, Dr. Charles Porter, Dr. Helen Wilson, and Dr. O. May. Amongst the members who spoke were Dr. Frederick Taylor, Sir Malcolm Morris, and Dr. Helen Wilson.

Mr. Long congratulated Lord Sydenham and the distinguished members of the Royal Commission on the successful conclusion of their labours, and assured the deputation that so far as he and the Department were concerned they were pushing an open door. He informed the deputation that he had communicated with the Treasury, and they were prepared to provide the necessary grant to carry out the recommendations of the Royal Commission with regard to the provision of facilities for diagnosis and treatment. These grants would cover 75 per cent. of the cost incurred by local authorities. It was not proposed to create special hospitals for the treatment of venereal diseases, as it was felt that treatment would be carried out more efficiently and with less danger of prejudice at the existing general hospitals. In conclusion, Mr. Long stated that he welcomed an assurance given by the Bishop of Southwark that the movement would receive the full support of all the religious and social organisations of the country.

Mr. Long's announcement gives effect to the most immediate and practical recommendation contained in the Final Report of the Royal Commission on Venereal Diseases—namely, a comprehensive scheme for free diagnosis and treatment in general hospitals organised by local authorities and subsidised as to 75 per cent. of the cost by the Imperial Exchequer. Of the major recommendations this is the only one practicable through Departmental action only. The others—such as confidential registration of causes of death, legal protection for medical men in making certain confidential communications, and the making of venereal disease an incapacity for marriage—would, of course, require legislation.

A HOSPITAL AUTHORITY.

A STRENUOUS conflict on hospital management is recalled by the death, on April 16th, at Sydenham, of Mr. Burford Rawlings, at the age of 76. In 1866 Mr. Rawlings was appointed secretary to the National Hospital for the Paralysed and Epileptic, Queen's Square, W.C. When the new buildings (the Albany Memorial) were completed in 1885 he was given the additional title of general director. Mr. Rawlings's uncompromising insistence on the supremacy of lay control in hospital administration brought him into conflict with the medical staff, and a long controversy between the board of management, with Mr. Rawlings as protagonist, and the medical staff, resulted in the resignation in 1901, both of the board and of its secretary, who thus brought to a close his 35 years' service. The controversy was of more than local interest, and was kept before the public by a long correspondence in *The Times*. Mr. Rawlings was in some ways in advance of his day, as, for instance, in his contention that patients should pay for hospital treatment according to their means. He saw this at first strenuously opposed, and then adopted.

Mr. Rawlings contributed articles to the leading reviews, and was also author of "Gardens of Light and Shade," published under a pseudonym; of "The Waters of Argyra," "The Wooing of a Goddess," and other volumes of verse; and of "A Hospital in the Making." The last named is more than a history of a particular institution, and forcibly sets forth its writer's creed that "No greater misfortune could be suffered by the sick

poor than the severance of hospital work from its religious and benevolent bases, and its subjection to purely economic and scientific ends."

WITTENBERG MEDICAL HONOURS.

It is announced that the King has been graciously pleased to give directions for the following appointments :—

C.M.G. (Additional Member).

Major Harold Edgar Priestley, R.A.M.C. In recognition of his distinguished service and devotion to duty at the Camp at Wittenberg, Germany, during the typhus epidemic which prevailed there from February to June, 1915.

D.S.O.

For their share in the same work of devotion, the King has been pleased to appoint the following officers to be Companions of the Distinguished Service Order :—Capt. Alan Cunliffe Vidal, R.A.M.C., and Temp. Capt. James La Fayette Lauder, R.A.M.C.

The revolting story of the crime of Wittenberg Camp, where British and other prisoners of the Allied nations suffered terrible privations owing to the inhumanity of the German military authorities, was told in a report published by the Government Committee on the Treatment by the Enemy of British Prisoners of War.

OBITUARY.

DR. FREDERICK LEVER, M.B., B.S., M.R.C.S., HARROGATE.

The death of Dr. Frederick Lever, of Montpellier Lodge, Harrogate, occurred on April 16th, in his 69th year. Dr. Lever had been observed recently to be in somewhat failing health, and for a few days suffered from dyspeptic symptoms, which resulted in acute cardiac failure. He was a member of an old medical family, his grandfather and father being prominent members of the profession. The son of the late Mr. Benjamin Lever, surgeon, of Blakesley, Northamptonshire, he was educated at the Royal Epsom Medical College, and received his special medical education at Guy's Hospital, where he took the Sands-Cox Scholarship in Physiology in 1882. He became a B.S.Lond. in 1882 and M.B., B.S. Lond. and M.R.C.S. in 1885. He commenced practice in Harrogate 30 years ago, and from the commencement was a prominent member of the Harrogate Medical Society, of which he was twice elected president. He always took a great interest in the advancement of Harrogate as a spa, and especially in comparison with the watering-places of Europe, and joined heartily in all efforts in the welfare of the health resort in that direction. Although somewhat retiring, he was an extremely genial and courteous gentleman, well informed, and possessed a good scientific knowledge. He devoted himself to the interests of his profession, refraining from participating in the public life of the town. He leaves a widow, son and daughter.

LIEUT.-COL. W. WOODFORDE-FINDEN, M.R.C.S., L.R.C.P. LONDON.

Lieutenant - Colonel W. Woodforde - Finden, brigade surgeon in the Indian Medical Service, died on April 27th, in a nursing home after a long illness. The only son of the late George Corfield Finden, he received his medical training at King's College Hospital, qualifying M.R.C.S.Eng. in 1865, and L.R.C.P.Edin. in the following year. He obtained his first commission on October 1st, 1866, and afterwards did duty with the 94th Foot, the 11th Bengal Cavalry, the 2nd Gurkhas, the 13th Bengal Infantry, and the 7th Bengal Cavalry. He was on Lord Lytton's staff at Simla in 1876 and on Sir Donald Stewart's Staff in Afghanistan, 1878 to 1880. Colonel Woodforde-Finden took part in the march from Kabul with Lord Roberts to the relief of Kandahar and the battle of Kandahar, was mentioned in despatches, and was awarded a medal with clasp and the bronze star. He served in Burma, 1887 to 1888, and on the North-West Frontier of India, second Miranzai Expedition, 1891, obtaining another medal with clasps for these undertakings. He retired on December 21st, 1891.

DR. W. ALLAN JAMIESON, M.D., LL.D., F.R.C.P., EDINBURGH.

Dr. William Allan Jamieson, President of the Royal College of Physicians, Edinburgh, in 1909-10, has died at his residence in Edinburgh at the age of seventy-seven. Educated at the Universities of Edinburgh and Vienna he graduated M.B., C.M.Edin. with honours in 1865. Devoting himself to the study of dermatology, Dr. Jamieson attained a high position in his profession. A successful teacher, he was for many years lecturer on diseases of the skin at Edinburgh University, and dermatologist to the Edinburgh Royal Infirmary. He was surgeon to the King's Body Guard in Scotland, the Royal Company of Archers, was an LL.D. of Edinburgh, and a Knight of Grace of the Order of St. John of Jerusalem in England. He held the Royal Household Jubilee medal of 1897, and the Coronation medal of 1911. Dr. Jamieson was the author of a "Manual of Diseases of the Skin," which has passed through several editions, and of the "Care of Skin in Health," and had contributed various papers to professional publications on dermatology and its allied subjects.

DR. JOSEPH W. SMITH, M.R.C.S., L.M., L.S.A., J.P., NORTHWICH.

The death occurred suddenly at Northwich, on April 13th, of Dr. Joseph William Smith, at the age of seventy-five. Dr. Smith was the doyen of Mid-Cheshire men. After a medical training at King's College Hospital, he qualified M.R.C.S.Eng., L.M., and L.S.A. in 1866. He had been in practice in Cheshire for many years, and in addition to his professional duties, had taken a prominent part in public affairs. He was appointed a magistrate of the county in 1895, and had been a county councillor. He died in harness, as it was on his return from a meeting of the Cheshire Appeal Tribunal that he had a seizure which resulted in his death. Dr. Smith was the Union Medical Officer, and had held the posts of Surgeon to the Northwich Infirmary and of the Northwich and Weaverham Provident Dispensary. He was held in high esteem, and a few years ago the inhabitants of the district presented him with a motor car and garage.

DR. JAMES BROWN BIRD, M.D., CARLISLE.

On Saturday, Dr. J. B. Bird, one of the leading practitioners in Carlisle, died suddenly of pneumonia. He was a native of Newcastle, and took the degrees of M.B., C.M., in 1890 at Edinburgh University, where he was Stark scholar. In 1897 he graduated M.D. After acting as house physician to the Brampton Consumptive Hospital and assistant medical officer to the Crichton Institution at Dumfries, he became house surgeon at the Cumberland Infirmary and subsequently started general practice in Carlisle. He was physician to the Cumberland Infirmary. He took a great interest in the Association for the Prevention of Consumption, and was one of those who greatly assisted in the establishment of the sanatorium at Blencathra. Dr. Bird was one of the founders of the Carlisle Burns Club, to which he contributed papers. He was 50 years of age, and is survived by wife and family.

DR. JAMES MORRISON, M.D., M.R.C.S., L.R.C.P., LONDON.

Dr. James Morrison, of Weymouth Street, Portland Place, London, W., died at his residence on Good Friday, and on Easter Monday the death occurred of his widow, Mrs. Morrison. Dr. Morrison

studied at St. Bartholomew's Hospital and in Berlin, and qualified M.R.C.S., L.R.C.P., in 1892. In the following year he graduated M.B.London, and took the M.D. degree in 1894. He had been tutor in midwifery at St. Bartholomew's Hospital, Resident Medical Officer of Queen Charlotte's Hospital, and honorary Physician Accoucheur to the Queen's Jubilee Hospital, and also held the latter position at the Farringdon Dispensary and Lying-in Institution.

DR. CHARLES JOHN GRELLET, M.R.C.S., L.S.A., HITCHIN.

The death occurred on April 26th, at the age of 73 years, of Dr. Charles John Grellet, a prominent medical practitioner in Hitchin. Dr. Grellet received his medical training at St. Bartholomew's Hospital, and qualified M.R.C.S.London and L.S.A., in 1864. He had practised in Hitchin for many years, latterly with the assistance of his two sons. He was consulting surgeon to the North Herts and South Bedford Hospital at Hitchin.

DR. FRANK C. P. HOWES, M.D., LINCOLN.

Dr. Frank Charles Plumptre Howes, who has died at Lincoln, was a son of the late Rev. T. G. F. Howes, rector of Belton, Suffolk. He studied for the medical profession at King's College Hospital, London, and at the University and Royal College of Surgeons, Edinburgh. In 1863 he qualified L.S.A. London, and graduated M.D.Edinburgh in 1864. He was admitted M.R.C.S.Eng. in 1865 and L.R.C.P.Lond. in 1868. He had been resident medical officer at the Eastern Dispensary, Bath, resident surgeon at the Aston Branch of the General Dispensary, Birmingham, house surgeon at the General Dispensary, Lincoln, Bradford Infirmary, and Kensington Dispensary.

Medical News in Brief.

West London Medico-Chirurgical Society.

A reception will be held at the West London Hospital by the President and Council of this Society on Wednesday next, May 10th, at 8.30 p.m. An interesting programme of music and other entertainment will be provided by members of the Savage Club and others. Mr. James Cantlie, F.R.C.S., will give an address on the work of the British Red Cross Society. There will be exhibits of Red Cross methods and appliances by the Hammersmith Division of the British Red Cross Society, and by Messrs. E. and R. Garroud, of Edgware Road, W. Skiagrams and scientific instruments will be shown by Dr. Reginald Morton, assisted by Messrs. Newton and Wright. Light refreshments will be provided. Members are asked to bring guests, and ladies are particularly invited. Tickets 5s. each person, and the whole of the proceeds after paying expenses will be given to the Officers' Families Fund to be specially devoted to the families of Officers of the Royal Army Medical Corps.

Preservation of Food.

Dr. Howarth, the City of London Medical Officer of Health, in a report to the Corporation on the tendency to put boric acid in food products without any form of control, says there is a conflict of opinion as to the harmfulness of boric acid. He suggests research work by the Local Government Board to clear up this uncertainty. If boric acid is harmful to human beings, a statement, he says, should be made definitely to that effect.

Teachers' Conference and Child Health.

At the Conference of the National Union of Teachers, at Buxton, on April 27th, Mr. T. P. Sykes (Bradford), a former president, moved that "This Conference, considering the physical development of young children is a matter of supreme national importance, and that any present neglect of necessitous or delicate children must result in permanent injury to the individual and to the State, urges local authorities to see that such children are in no way neglected." Notwithstanding present demands consequent on the war, he said, Bradford was already showing in a practical manner what really ought to be done all over the country.

Miss E. Phillips (Cardiff), who seconded, said it was impossible to walk about the large towns and villages without seeing signs of hunger and preventable disease. They saw little children with pinched faces, weak bodies, scantily clothed, badly nourished, and it was their place to see that such children were properly clothed and fed, whatever the cost.

The motion was carried.

Royal Waterloo Hospital Centenary.

In commemoration of the 100th birthday of the Royal Waterloo Hospital for Children and Women a great meeting of its supporters was held on April 27th afternoon at the Mansion House. The Lord Mayor presided.

During the 100 years of its existence the Royal Waterloo Hospital has, the Lord Mayor stated, treated over a million patients, the great majority of them being children. It has now over 100 beds, and last year there were nearly 1,200 in-patients and about 40,000 out-patients.

At the conclusion of the meeting the Lord Mayor announced that the amount so far received in response to the Duchess of Albany's appeal was £1,807 4s.

Royal College of Surgeons of England.

The following demonstrations of specimens in the Museum will be given in the Theatre of the College in Lincoln's Inn Fields, by Mr. S. G. Shattock, the Pathological Curator, at 5 o'clock p.m. each day. Monday, May 1st, 5 p.m., Fractures. Monday, May 8th, 5 p.m., Foreign Bodies. Monday, May 15th, 5 p.m., Results of Inflammation.

The demonstrations are open to medical students and practitioners. First-aid and ambulance students desirous of attending, will also be admitted.

Tubercular Patients and Sanatorium Treatment.

At a meeting of the London Insurance Committee, Dr. J. E. Squire, medical adviser, reported that although the number of contributors had diminished owing to enlistment of healthy young adults, the candidates for sanatorium treatment had not diminished in anything like the same proportion. He suggested that tuberculosis officers should avoid keeping early cases under dispensary treatment before putting them forward for sanatorium admission, and that an endeavour should be made to persuade medical practitioners to recommend early cases at once rather than keep them under domiciliary treatment. At the same meeting it was decided that the sub-committee dealing with the recruiting of panel practitioners should submit to the military representative a list of persons whose services in dispensing medicines are indispensable to the need of the general population.

Lady Kelvin's Bequests.

At the Court of the Glasgow University on April 27th, it was stated that by her will Lady Kelvin bequeathed £5,000 to be applied for promoting research and the teaching of physical science in connection with the Chair of Natural Philosophy at Glasgow University, where Lord Kelvin was Chancellor at the time of his death. Lady Kelvin also bequeathed to Glasgow University all the decorations and medals conferred upon the late Lord Kelvin. This is a rare collection, and will prove a valuable addition to the University museum. The gifts were gratefully acknowledged.

Carlisle School Doctors.

The point as to whether the services of the two medical officers of Carlisle in the medical inspection and treatment of the school children of the city is more essential in the national interest than their services in the Army was the subject of considerable discussion at the meeting of the Carlisle Education

Committee on April 26th. In response to an inquiry from the Board of Education, a sub-committee recommended that the Board be informed that having regard to the importance of the service of the two doctors, they should be retained in their present position until the utmost urgency existed for their withdrawal.

Mr. F. Ritson moved that the recommendation be deleted from the minutes. He said the doctors could be more advantageously employed in the Army Medical Department than in compiling a mass of statistics as to how many children had ringworms or itch. The sub-committee's recommendation was adopted by six votes to five.

Bolingbroke Hospital.

At the annual meeting of the Bolingbroke Hospital, held on April 28th, some concern was expressed with regard to the financial position owing to the increased prices of many articles. The report showed that expenditure had exceeded revenue by £1,487. The chairman (Mr. E. J. Thorne) urged that friends of the hospital should, if possible, increase their subscriptions, and he expressed the hope that the people of the neighbourhood would rally to its support. The Vicar of Battersea (the Rev. H. Foster Pegg) was elected a Governor.

St. Paul's Hospital.

The annual meeting of St. Paul's Skin Hospital was held on April 28th. The chairman, Mr. Frederick Cowper, explained that five of the surgeons had gone abroad on war service, and that three of the staff were also engaged on military hospital work in London. In view of the possibility, anticipated by the Royal Commission on Venereal Diseases, that the curative resources of the hospital may be heavily taxed for many years after the war, the chairman solicited the support of the charitable public in order to equip the hospital for such an eventuality, as well as to enable the Committee to clear off the debt of £2,000 and to secure larger premises. In accordance with the recommendation of the Royal Commission, the Committee had been able to secure a public source of revenue for the supply of remedies to necessitous patients.

Infant Welfare.

In the House of Commons, on April 13th, Mr. Long, replying to Mr. King, who asked whether he would issue instructions to local authorities that an expenditure not exceeding ½d. in the pound might be judiciously undertaken, even in war-time, on promoting infant welfare and combating infant mortality, said:—I have already encouraged local authorities to undertake work for the promotion of infant welfare, and Parliament has been asked to vote money for furthering their efforts. I do not think that anything would be gained by an instruction such as is suggested.

Royal College of Surgeons of England—Prizes.

The subject for the "Triennial Prize," consisting of the John Hunter Medal executed in gold to the value of fifty guineas, or, at the option of the successful author of the dissertation, of the said medal executed in bronze, with an honorarium of fifty pounds, will be "The Development of the Hip-Joint and the Knee-Joint of Man." That for the "Jacksonian Prize" (the amount of the dividend, £15, received from the Trust), is, for 1916, "Methods and Results of Transplantation of Bone in the Repair of Defects caused by Injury or Disease," and for next year, 1917, "The Causation, Diagnosis, and Treatment of Traumatic Aneurysm, including Arterio-Venous Aneurysm."

Conditions:—Candidates must be Fellows or Members of the College, not on the Council; the dissertations should be addressed to the Secretary and be *typewritten* in English, the number and importance of original facts will be considered principal points of excellence: *cited cases to be placed in an appendix*. Each dissertation to be distinguished by a motto or device; and accompanied by a sealed envelope containing the name and address of the author, and having on the outside a motto or device corresponding with that on the dissertation. Those dissertations which shall not be approved, with their accompanying drawings and preparations, will, upon authenticated application within the period of three years, be returned together to the respective authors. The dissertations for the Triennial Prize must be delivered at the College not later than 4 o'clock p.m. on Tuesday, December 31st, 1918. Those for the Jacksonian Prize for the present year, 1916, before December 30th; and those for the Jacksonian Prize for the ensuing year, 1917, must be delivered at the College before December 31st, 1917.

American Red Cross Work in Germany.

The question of the shipment by the American Red Cross of hospital supplies to Germany is again discussed. It is asserted that, in default of permits to pass the blockade, the American Red Cross is obliged to notify its branches that no more supplies can be received for Germany. It is believed that Great Britain will continue to refuse to allow shipments unless the American Red Cross should establish units in Germany, in which case supplies would, of course, be allowed to reach these units.

Herb-Growing for Profit.

The Herb-Growing Association, of which Miss Alice Sandford is chairman, and whose offices are at No. 7, Queen Anne's Chambers, S.W., has issued its first monthly circular. It gives information of use to people who have the time and the necessary botanical knowledge to undertake the gathering or growing of common herbs.

Among the most useful herbs to cultivate or gather are the dandelion, the roots of which are washed and dried; coltsfoot, whose yellow flowers now gleaming on railway banks and waste places will be soon followed by the leaves which are dried for medicinal purposes; broom tips, the male fern, and the autumn crocus. The association has established a drying shed and warehouse at Bridge Farm, Weybridge, and will undertake to dry the herbs for members. It will also sell them on commission. As much as 60s. a hundredweight is offered for dried dandelion roots and 23s. for a similar quantity of male fern root.

A Year's Infectious Disease.

A Local Government Board return, issued on April 10th, shows the total number of cases of the chief notifiable diseases in England and Wales during 1915. The following are the principal figures:—

Tuberculosis (pulmonary) 73,358, ditto (other forms) 22,864, scarlet fever 127,086, diphtheria 53,597, enteric fever 6,364, puerperal fever 2,057, erysipelas 23,382, cerebro-spinal fever 2,566, poliomyelitis 517, ophthalmia of the newly-born 6,806 (being 8.34 per 1,000 births).

Of the 90 cases of small-pox, 31 cases were notified from towns connected with ports. Of 45 cases of typhus fever, 37 were notified in Liverpool. Of cerebro-spinal fever the highest numbers of cases in administrative counties were notified in—Middlesex 115, Southampton 110, Wiltshire 108, and Kent 106. In London 624 cases were notified.

Harrogate Baths Development.

At a meeting of the Harrogate Town Council Mr. J. S. Rowntree emphasised the importance of the Harrogate bath treatments being kept up to date, particularly when Continental spas were closed, and said the Baths and Wells Committee were now introducing a shallow bath for the Harrogate peat massage treatment, which was not being given anywhere else in the world. A bath which would enable rheumatic patients to adopt different attitudes and relieve their pains whilst bathing was being installed, and also a whirlpool bath for softening parts of the body requiring massage. The committee were also awaiting the development of the Simpson light, which would form a new development of the X-ray treatment.

Bad Teeth and Tuberculosis.

DR. A. M. HEWAT, tuberculosis officer for Preston, in his annual report deals with the question of the dental treatment of patients attending the tuberculosis dispensary, and says it is a sheer waste of money to send patients to the sanatorium or to give them drug or vaccine treatment at the dispensary if their teeth are in a condition of decay and there is septic absorption.

Hospital for Canadians.

A CONVALESCENT hospital in London for Canadian officers will be opened shortly. It will have twenty-five beds. The building overlooks Putney Heath, and from its windows the patients will be able to see a memento of their own country in the shape of the Canadian flag-pole on Wimbledon Common. Another feature of special interest is North House, at one time the residence of the Marquis of Dufferin, a former Governor-General of Canada, and now occupied by the present Marquis. In the immediate neighbourhood may also be seen the home of William Pitt and of Oliver Cromwell. The new hospital has been presented to the Canadian Government by Mr. William Perkins Bull, K.C., whose residence adjoins the hospital, and who will co-operate with the Government in the management and upkeep of the institution.

Fined for Careless Diagnosis.

THE Insurance Commisioners are reported to have fined a panel doctor £10 for not taking sufficient care in diagnosing a case of consumption. In this connection the London Insurance Committee states that such fines for breaches by panel doctors are generally excessive and disproportionate, and beyond what the justice of the case requires.

Wittenberg Horrors.

A FRENCH sergeant, released from Wittenberg last February, thus records his memories of his sufferings:—

Free! from Wittenberg and its prison; free! from those long hours of bitterness and loathing. Wittenberg is now only a nightmare and an indelible memory of anguish. Wittenberg, a camp of misery where, last April, I suffered tortures from hunger which brought on two heart-attacks; where our humble parcels were pilfered and our tins of preserved food were prised open by German bayonets—I can tell this now. Wittenberg, the home of brutality, where police dogs were let loose unmuzzled among us in the barracks, where scourge and lash and knout were current change, and where the posts to which we were tied caused many an illness. Wittenberg, a camp of death, where 800 of my comrades perished either from lack of care or from cowardly rifle fire; where, on the eve of my departure, they brought in the corpse of a poor little private, only 22 years old, electrocuted in a factory where he was forced to do dangerous work, and where, with hateful cynicism, they performed the *post-mortem* before our eyes in the hospital. These are my "souvenirs" of a hellish experience now happily at an end.

Royal Institution Lectures.

AT the Royal Institution on Saturday, May 6th, Professor W. H. Bragg will begin a course of lectures on "X-rays and Crystals." The Friday evening discourse on May 5, at 5.30, will be given by Sir J. Mackenzie Davidson on "Electrical Methods in Surgical Advance."

New Welsh Tuberculosis Hospital.

AT Carnarvon, on April 26th, Mrs. Lloyd George opened a tuberculosis hospital of 40 beds which has been established by the King Edward Welsh National Memorial Association. Among those present were the Hon. Violet Douglas-Pennant and Dr. Meredith Richards, two of the Welsh Insurance Commissioners, and Mr. D. W. Evans, general director of the association. Mrs. Lloyd George said she looked on the tuberculosis campaign much as she did on the war. The fact that so many military huts about the country were merely of a temporary character made her think the war would be over some day, and so, in having hospital buildings which were not too substantial she hoped we were going to overcome consumption as surely as we were going to win the war.

PASS LISTS.

Royal College of Physicians.

AT a meeting of the Royal College of Physicians of London held on April 27th, the President of the college, Dr. Frederick Taylor, occupying the chair, members of the college were elected fellows, a number of gentlemen were admitted members, and others received licences to practise physic:—

FELLOWS.—J. A. Arkwright, M.D.Camb., E. A. Cockayne, M.D.Ox., Michael G. Foster, M.D.Camb., C. E. Lakin, M.D.Lond., H. L. McKisack, M.D.Roy. Univ., Ireland, J. M. H. MacLeod, M.D.Aberd., C. H. Miller, M.D.Camb., and H. W. Wiltsnire, M.D.Camb.

MEMBERS.—A. G. Anderson, M.D.Aberd., R. Hill, M.D. Queen's Univ., Belfast, W. MacAdam, M.D. Glasg., and H. H. Scott, M.D.Lond., L.R.C.P., M.R.C.S.

LICENTIATES.—*Hannah K. Alton, K. D. Atteridge, J. Aydon, A. J. Bado, H. J. Bensted, D. S. Brachman, J. P. Bracken, I. R. R. Brogden, A. S. Carter, H. H. Castle, L. A. Célestin, G. E. Chissell, *Hester Mary Church, *Mabel Campbell Clark, A. H. Clarke, P. S. Clarke, H. M. Cohen, W. H. Coldwell, W. M. Crombie, R. C. Davenport, S. G. Dunn, F. Dunphy, M. Dwyer, W. F. Eberli, A. W. F. Edmonds, P. O. Ellison, G. I. Evans, H. S. Evans, L. W. Evans, W. Farquharson, G. Fehrsen, E. A. Fiddian, S. W. Fisk, M. R. V. Ford, A. R. Fuller, D. H. A. Galbraith, G. T. Garraway, Sures Chandra Ghose, C. C. Goodall, F. H. S. Greenish, *— Haigh, J. C. H. Harris, S. F. Harris, A. N. Haworth, N. N. Haysom, W. A. Hotson, E. G. Howell, G. P. B. Huddy, E. C. Hudgell, S. Hutchinson, T. H. Jackson, Bhoputsinhji Bhugvatsinhji Jareja, W. G. Johnston, A. M. Jones, T. Jones, V. Kameneff, Teng Liang Kan, R. P. Langford-Jones, E. E. Lightwood, C. W. B. Littlejohn, H. B. Logan, P. G. McEvedy, Showkiram Sahijram Malkani, P. S. Marshall, F. C. Mason, Adeline Mabel Matland, B. H. Mellon, H. W. L. Moesworth, T. D. Morgan, A. G. Morris, G. Moulson, Sinnethamby Muttiah, Kathira Velu Muttukumaru, F. Newey, D. C. Norris, A. J. Orenstein, F. C. Ormerod, P. E. D. Pank, G. E. Paul, R. R. Powell, Jagan Nath Puri, H. M. Quackenbos, Raghavendra Rau Damodar, M. Schwartz, C. R. Reckitt, B. T. Rose, P. G. Russell, D. M. Smith, W. Steadman, H. G. Stormer, G. C. Swanson, D. G. C. Tasker, H. W. Taylor, G. B. Wild, R. W. Willenberg, G. C. Williams, A. Williams-Walker, C. E. Wise, R. S. Woods.

*Under the Medical Act, 1876.

The English Conjoint Board.

AT a meeting of Comitia of the Royal College of Physicians of London on Thursday last, licences to practise medicine were conferred upon 99 candidates (including six ladies) who have passed the final examination in Medicine, Surgery, and Midwifery of the Conjoint Examining Board:—

Hannah K. Alton, K. D. Attebridge, J. Aydon, B.A.Cantab, A. J. Bado, H. J. Bensted, D S. Brachman, M.D., B.A., J. P. Brachen, I. R. R. Brogden, B.A.Cantab, A. S. Carter, L.D.S.Eng., H. H. Castle, L. A. Celestin, G. E. Chissell, Hester M. Church, Mabel C. Clarke, A. H. Clarke, P. S. Clarke, H. M. Cohen, M.D., W. H. Coldwell, W. M. Crombie, R. C. Davenport, S. G. Dunn, F. Dunphy, M. Dwyer, W. F. Eberli, B.A.Cantab, A. W. F. Edmonds, P. O. Ellison, G. L. Evans, B.A.Oxon, H. S. Evans, B.A.Cantab, L. W. Evans, W. Farquharson, G. Fehrsen, E. A. Fiddian, B.A.Cantab, S. W. Fisk, M. R. V. Ford, A. R. Fuller, D. H. A. Galbraith, G. T. Garraway, S. C. Ghose, C. C. Goodall, F. H. S. Greenish, M.A.Cantab, Ethne Haigh, M. B., B.S.

Durham, J. C. N Harris, B.A.Cantab, S. F. Harris, A. N. Haworth, N. N. Haysom, W. A. Hotson, E. G. Howell, G. P. B. Huddy, Edith C. Hudgell, S. Hutchinson, T. H. Jackson, B. B. Jareja, W. G. Johnston, A. M. Jones, T. Jones, B.A.Cantab, V. Kameneff, Moscow, T. L. Kan, R. P. Langford-Jones, E. E. Lightwood, C. W. B. Littlejohn, H. B. Logan, P. G. McEvedy, S. S. Malkani, P. S. Marshall, F. C. Mason, Adeline M. Matland, B. H. Mellon, F.R.C.V.S., H. W. L. Molesworth, T. D. Morgan, B.A.Cantab, A. G. Morris, G. Moulson, S. Muttiah, K. V. Muttukamaru, M.B., B.S.Madras, F. Newey, D. C. Norris, A. J. Orenstein,, M.D., F. C. Ormerod, P. E. D. Pank, B.A.Cantab, G. E. Paul, M.B., B.S.Madras, R. R. Powell, B.A.Cantab, J. N. Puri, H. M. Quackenbos, R. R. Damodar, Madras, C. R. Reckitt, B. T. Rose, B.Sc., P. G. Russell, M. Schwartz, D. M. Smith, W. Steadman, H. G. Stormer, G. C. Swanson, H. W. Taylor, D. G. C. Tasker, B.Sc., G. B. Wild, R. W. Willenberg, L.M.S.Ceylon, A. Williams-Walker, G. C. Williams, B.A.Cantab, C. E. Wise, M.D. Lausanne, and R. S. Woods, B.A.Cantab.

The Royal College of Surgeons of Ireland.

The following candidates have passed this examination, Spring 1916:—

First Dental Examination.—Mr. Redmond J. Keating, Mr. Joseph B. McNamara Moorhead.

Final Dental Examination.—Mr. Ernest S. Brabazon, Mr. John W. Daunt, Mr. Thomas Edwards, Mr. Maddison B. Fisher, Mr. Thomas G. O'Connor, Mr. Israel Sharpe, Mr. Bernard Scher.

Primary Fellowship Examination.—Mr. James F. Seale, Mr. Alan G. Wright.

Final Fellowship Examination.—Mr. Arthur T. Thurston.

Conjoint Examinations in Ireland.

The following candidates have passed the Examination of the Royal College of Physicians and the Royal College of Surgeons, Spring 1916:—

Preliminary Examination.—Thomas Brady, Dominick J. Browne, Stephen E. Brown, Wm. H. Browne, Joseph A. B. Clarke, Dermot P. Doyle, Charles J. C. Earl, Maxey Elyan, Isaac W. Ginsburg, Charles P. Hearty, George Horkan, Lilian V. Johnston, Michael J. Kelly, Maurice Levy, Michael J. McDonnell, John D. McEnery, Herbert O. Mackey, Michael J. Mallon, Mary R. Nolan, Gerald C. O'Grady, Joseph Shannon, Wm. Smyth, John Tehan, Lynda Wilkin.

First Professional Examination.—L. S. Clifford, J. L. Courtney, A. L. Dempsey, J. A. Flynn, J. E. Hudson, P. Kelly, T. J. Kerr, C. Kidd, J. F. Lyne, J. J. Lee, W. H. Mosbery, P. J. Osborne, W. P. Reynolds, T. J. Ryan.

Second Professional Examination.—M. Barden, Joseph Cockburn, B. Epstein, S. J. Halpin, B. F. Honan, J. McAleer, B. T. McMahon, R. H. Newman, J. Pousner, J. Power.

Third Professional Examination.—J. J. Brennan with honours, S. J. Healy with honours, R. J. Bassett, J. P. Brennan, J. J. Campbell, E. M. Lloyd Dodd, D. J. M. O'Flanagan, L. Finnegan, J. A. Hamilton, F. B. Harrison, J. K. Holland, D. B. McEniry, J. A. McSweeney, B. F. O'Reilly, J. C. Smyth, D. E. Young.

Final Examination.—John F. Coffey, King Elmes, Hugh Gerrard, James Magner, Charles A. R. McCay, Daniel McCormack, John A. McKinnon, Alan J. Neilan, Joseph P. Pegum, George C. L. Woodroffe.

Royal Colleges of Physicians and of Surgeons, Edinburgh, and Royal Faculty of Physicians and Surgeons of Glasgow.

The following is a list of candidates who passed the examinations of the Conjoint Board for Scotland:—

First Examination.—The following passed: Joseph Campbell, James Innes Coventry, Agnes Macilwraith Hill, Evan Robert Lloyd, James Charles Meek, William Muirhead Reid, Frederick James Stevenson, Marguerite Martha Isobel Swanson.

Second Examination.—The following passed: Richard Gordon Bell, Sidney Hill Waddy, Maurice Julius Woodberg.

Third Examination.—The following passed: Robert Austin, Alexander Balfour Black, Donald M'Kenzie Black, James Calder, Jean M'Murray Crawford, Robert Phillips Crawford, John Thomas Dier, George Alexander Grandsoult, Reginald Douglas Howat, Lloyd William Hughes (with distinction), Edward Glyn Jones, Joseph Michaelson.

Final Examination.—The following candidates having passed the final examination were admitted L.R.C.P.E., L.R.C.S.E., L.R.F.P. and S.G.: Final List—William Paterson Hay Lightbody, Glasgow; John Park Mathie, Bilston, Staffs.; John Robert Beith Robb, Glasgow; Alexander Morrison, Glasgow; Thomas Jackson, Wishaw; Andrew Smith, jun., Wickham, Co. Durham; John M'Cartney, Girvan; Ronald Harley Rattray, Melbourne; Thomas Marshall Metcalfe, Glasgow.

University of Glasgow.

At the graduation ceremony on April 25th the following degrees were conferred.—

Doctor of Medicine (M.D.).—Dagmar Florence Curjel.

Master of Surgery (Ch.M.).—Robert Buchanan Carslaw.

Among the University prizes and special class prizes gained were the following:—

Thesis for M.D.—Matthew Young, M.D., Bellahouston Gold Medal.

Research in Anatomy.—Matthew Young, M.D., Struthers Gold Medal and Prize of £20.

Chemistry.—John B. Sandford, George Roger Muirhead, prize of £2 5s.

Laryngology and Rhinology.—Kenneth J. T. Wilson, Asher Asher Gold Medal.

Physiological Physics.—William Napier, Arnott Prize of £25.

General Physics.—William L. Templeton, Arnott Prize of £15.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s., post free at home or abroad.

Foreign subscriptions must be paid in advance. For India Messrs. Thacker, Spink and Co., of Calcutta, are our officially appointed agents. Indian subscriptions are Rs. 15.12. Messrs Dawson and Sons are our special agents for Canada. For South Africa, The Record Publishing Co., Cape Town. Messrs. Geo. Robertson and Co., of Sydney and Melbourne, are our special agents for Australia.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

THE WELLCOME HISTORICAL MEDICAL MUSEUM.

We are asked to announce that this institution will be reopened to-day (Wednesday, May 3rd). A special exhibition has been arranged in the Hall of Statuary, of Japanese charms and amulets of medical interest, which have been collected and kindly lent by W. L. Hildburgh, M.A., Ph.D. The collection is an exceptional one, especially to those interested in medical folk-lore, and visitors will be admitted on presenting their visiting card.

The museum will be open from 10 a.m. to 6 p.m. daily, and from 10 a.m. to 1 p.m. on Saturdays until further notice.

J. Laurence Green.—Your letter reached us too late for insertion in present issue; it will appear in our next.

INCREASED HOSPITAL EXPENSES.

The additional expenditure at St. Bartholomew's Hospital last year, due to the advance in the prices of provisions and fuel and to new charges, such as aircraft insurance, war bonus, allowances, etc., was roughly £9,447.

Dr. T. C. S. is thanked for the communication, for which we hope to find space in our next.

GAOL AS HEALTH RESORT.

Refusing an application for bail, Mr. Hedderwick, at North London said: "I would recommend anybody who wishes to have a healthy holiday to go to prison for six weeks if he can get admission to a British gaol. It is much better than going to a foreign spa."

TWA OR TROIS.

TOMMY (to Jock on leave): What about the lingo? Suppose you want an egg over there what do you say?

JOCK: Ye juist say "oof."

TOMMY: But suppose you want two?

JOCK: Ye say "twa ooffs," and the silly auld fule wife gies ye three, and ye juist gie her back one. Man, it's an awful' easy language.—*Punch.*

AMBULANCES AT THE FRONT.

SUPPLEMENTING the recent magnificent gift of a fleet of motor ambulances by the colliery proprietors and working miners in Nottinghamshire and Derbyshire, a motor ambulance, for which subscriptions had been obtained by the Mayoress of Nottingham, has been handed over to the Red Cross Society for use at the front.

W. S. M. (Newcastle).—The deaths registered last week from all causes were 17.2 per 1,000 of the population of your city; these were somewhat under the average, whilst the birth-rate was fortunately above the weekly average. Only one death is officially referred to as from infectious disease.

ROYAL COLLEGE OF PHYSICIANS.

SIR THOMAS BARLOW will deliver the Harveian Oration on St. Luke's Day, October 18th. In November Dr. Hector Mackenzie will deliver the Bradshaw Lecture, Dr. H. R. Dean the Horace Dobell Lecture, and Dr. W. H. Rivers the FitzPatrick Lectures.

CARITAS (Wimbledon).—For the administrative county including the City of London in the week ending 22nd April there were 1,866 births and 1,323 deaths registered. The annual death-rate from all causes, which had been 17.7, 17.9, 17.3 per 1,000 in the three weeks ended April 1, 8, and 15, fell to 16.0. Different forms of violence caused 42 deaths, all of which were the subject of coroners' inquests.

TO LEARN FROM GERMANY.

PROFESSOR SULCIMAN NUMAN PASHA, chief of the Turkish Army's Sanitary Corps, has arrived in Berlin accompanied by high military functionaries, "in order to study the sanitary institutions of the German Army."

BEE DISEASE.

MR. A. E. STONE, a beekeeper, of Tiverton, Devon, claims to have discovered a remedy for the Isle of Wight bee disease. He feeds the bees on sugar cane syrup, medicated with a solution of phenol and formaldehyde.

J. J. S. (Edinburgh).—We understand that the book is reprinting, hence the report of your bookseller is correct. As you are in immediate need of it, you would probably get a copy at a second-hand bookseller's or from Lewis's Library.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, MAY 3RD.

ROYAL SOCIETY OF MEDICINE (SECTION OF SURGERY) (1 Wimpole Street, W.).—5.30 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917.

ASSURANCE MEDICAL SOCIETY AND MEDICO-LEGAL SOCIETY (Conjoint Meeting) (House of the Royal Society of Medicine, 1 Wimpole Street, W.).—5.30 p.m.: Paper—Sir John Collie: The Effects of Recent Legislation upon Sickness and Accident Claims.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—Course of lectures on the Anatomy of the Human Body, for First-aid and Ambulance Students (open to all members of ambulance companies and first-aid classes):—5.30 p.m.: Prof. A. Keith. 4 p.m. to 7 p.m.: Exhibition of Anatomical Preparations and Specimens in the Theatre on lecture days and between 10 a.m. and 5 p.m. in the Hall of the Museum on the following day.

THURSDAY, MAY 4TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF OBSTETRICS AND GYNÆCOLOGY) (1 Wimpole Street, W.).—8 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917. Short Communication—Dr. Herbert Spencer: A Short Case of Primary Carcinoma of the Fallopian Tube. Specimens—Dr. Russell Andrews: Primary Carcinoma of the Fallopian Tube. Dr. Cuthbert Lockyer: Early Tubal Carcinoma arising in the Displaced Epithelium of Nodular Salpingitis. Papers—Dr. Henry Briggs: Unilateral Solid Primary Adenoma of the Ovary. Mr. John D. Malcolm: Second Case of Pneumo-peritoneum; Release of Gas; Recovery.

ROYAL SOCIETY OF MEDICINE (SECTION OF LARYNGOLOGY) (1 Wimpole Street, W.).—5 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917. Discussion.

FRIDAY, MAY 5TH.

WEST LONDON MEDICO-CHIRGICAL SOCIETY (West London Hospital, Hamersmith Road, W.).—8.30 p.m.: Meeting.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—Course of Lectures on the Anatomy of the Human Body, for First-aid and Ambulance Students (open to all members of ambulance companies and first-aid classes):—5.30 p.m.: Prof. A. Keith. 4 p.m. to 7 p.m.: Exhibition of Anatomical Preparations and Specimens in the Theatre on lecture days and between 10 a.m. and 5 p.m. in the Hall of the Museum on the following day.

Vacancies.

Birmingham and Midland Eye Hospital, Church Street, Birmingham.—Resident Surgical Officer. Salary £200 per annum, with residence and board. Applications to the General Superintendent and Secretary.

Leeds Public Dispensary.—Lady Resident Medical Officer. Salary £130 per annum, with board, residence, and laundry. Applications to the Secretary of the Faculty, Public Dispensary, North-street, Leeds.

Croydon General Hospital.—House Surgeon. Salary £200 a year, with residence, board and laundry. Applications to J. Jones, Secretary.

Northampton General Hospital.—House Surgeon. Salary £150 a year, with apartments, board, washing, and attendance. Applications to C. S. Risbee, Secretary-Superintendent.

Sheffield Royal Infirmary.—House Physician. Salary £120 per annum, with board and residence. Applications to Jno. W. Barnes, Secretary.

Victoria Hospital, Burnley.—Female House Surgeon. Salary £160 per annum, with residence, board, and washing. Applications to F. A. Hargreaves, Hon. Secretary, 7 Grimshaw Street, Burnley.

St. Bartholomew's Hospital, Rochester, Kent.—Senior Resident House Surgeon. Salary £300 per annum. Applications to Charles Speyer, Secretary.

Westmorland Consumption Sanatorium and Home, Meathop, Grange-over-Sands.—Second Assistant. Salary £200 per annum, with apartments, board, and laundry. Applications to C. F. Walker, M.D., B.S.Lond., D.P.H.Manch.

Dorset County Council.—Assistant Medical Officer of Health. Salary £300 per annum. Applications to Archdall Ffooks, Clerk of the County Council, County Offices, Dorchester.

Appointments.

MACKENZIE, H., M.B., Ch.B.Vict., Assistant Medical Officer of the Booth Hall Infirmary of the Manchester Union.

Births.

HANDLEY-READ.—On April 21st, (Good Friday), at 67 Brunswick Place, Hove, to Quartermaster-Sergt. Instructor (M.G.C.) E. H. Handley-Read, R.B.A., and Eva M. Handley-Read, L.D.S., L.R.C.P. and S., of Harley Place, W.—a son.

HODGES.—On April 20th, at Moorlands, Dumpton Park Drive, Broadstairs, the wife of Arthur Noel Hodges, M.B., of a daughter.

MACTIER.—On April 22nd, at St. Mary's Place, St. Andrews, the wife of W. B. MacTier, M.B., of a son.

Marriages.

BATCHELOR—KEMPTHORNE.—On April 26th, at Wyck Risington, Henry Washington Batchelor, Captain, R.A.M.C., son of the late H. T. Batchelor, of Cape Colony, to Kathleen Mary Kempthorne, younger daughter of the Rev. P. H. and Mrs. Kempthorne.

BEATTY—HANDFORD.—On April 27th, at the Parish Church, Hampstead, John Colley Pounden Beatty, Lieut., R.A.M.C., third son of the late Maj.-General R. Beatty, H.M. Indian Army, and of Mrs. Beatty, 3, Templemore Avenue, Rathgar, Dublin, to Isabella Emily Claudia, younger daughter of the late Rev. J. W. Handford and of Mrs. Handford, 14 Elierdale Road, Hampstead.

BEVEN—BREAKEY.—On April 26th, at St. Giles's, Reading, John Osmonde Beven, M.A., M.R.C.S., etc., youngest son of Mr. and Mrs. Francis Beven, of Ceylon, to Iris Marie Carew, elder daughter of Major A. J. Breakey, R.G.A., and Mrs. Breakey.

EVANS—EAMES.—On April 26th, at Twrgwyn, Bangor, Griffith Ivor Evans, Lieut., R.A.M.C., son of Mr. and Mrs. G. T. Evans, Haulfryn, Abergele, to Dilys, daughter of Mrs. Eames and the late Mr. William Eames, Moss Bank, Bangor.

GEMMELL—KELLETT.—On April 26th, at St. Mary's Church, Dalton-in-Furness, Lancashire, Captain Reginald W. Gemmell, R.A.M.C., of Upton, Cheshire, to Norah Winifred, younger daughter of the late William Kellett, J.P., of Portland Bank, Southport, and Dowdales, Dalton-in-Furness.

WILLANS—MANBY.—On April 27th, at East Rudham, Dr. Frederic Jeune Willans, of West Newton House, Sandringham, eldest son of the late Dr. W. Blundell Willans, of Much Hadham, Herts, to Wynefred, only daughter of Sir Alan and Lady Manby, of East Rudham, Norfolk.

Deaths.

CENTER.—On April 28th, at Naval Hospital, Malta, Fleet-Surgeon William Rudolf Center, of H.M.S. Russell, son of the late Surgeon-Col. William Center, I.M.S., and stepson to Mrs. Center, 7, Carlton Road, Ealing, aged 45.

GRELLET.—On April 26th, at Orford Lodge, Hitchin, Charles John Grellet, M.R.C.S., L.S.A., aged 73.

HOWES.—On April 25th, at Lincoln, Frank Charles Plumtre Howes, M.D., M.R.C.S., second son of the late Rev. T. G. F. Howes, rector of Belton, Suffolk.

ROUE.—On April 15th, William Barrett Roue, M.D., 2 Buckingham Place, Clifton, Bristol, aged 66.

WHARTON-HOOD.—On April 27th, after a short illness, at 5d, Montagu Mansions, Portman Square, Wharton Peter, M.D., elder son of the late Peter Hood, M.D., of 11, Seymour Street, Portman Square, in his 82nd year.

WOODFORDE—FINDEN.—On April 27th, at a nursing home, after a long illness, Lieutenant-Colonel Woodforde-Finden, Brig.-Surg., I.M.S., of 45, Portland Court, aged 71.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, MAY 10, 1916. No. 19.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

The Medico-Political Outlook.

IT is time that the medical profession began to take note of the undercurrent concerning itself which is flowing strongly beneath the billows of the present absorbing and insistent distractions. With our eyes and hearts intent upon the war, with added work, financial anxieties and domestic solicitude, there is scant leisure for the consideration of those questions of medical politics which at the best excite but a languid interest in the mind of the general practitioner. The attitude of nearly all previous governments towards the profession has been one of *laisser-aller*. Until the Insurance Bill was framed, legislative enactments affected portions only of the profession, medical officers of health, parish doctors, and the like, leaving the vast majority entirely untouched and for the most part completely apathetic. The coming of Mr. Lloyd George's breathless benevolence at the expense of the profession ought to have awakened us to a sense of our position as a whole; it has unfortunately done nothing of the sort. The working of the Insurance Act has certainly provoked a vast amount of individual and personal discontent, but that discontent, deep though it be, is for the most part inarticulate and therefore ineffectual. And it is inarticulate because it is unorganised.

Cave!

THE absence of organisation of the medical profession is a by-word among the politicians, who see in it an opportunity for exploiting the doctors in any and every scheme which may present itself to their ingenuity. Now, it must be clearly understood that, in spite of the war, the brains of the politicians are full of new schemes which are to take effect after the war; schemes in which the doctor, according to ancient custom, is to be used while being abused, and the present absence of organisation is to be the factor which will surely place him pinioned at the foot of the vote-catching legislator. On April 25th there was a very instructive paragraph in the *Times*. It appeared at the close of an article entitled "A Health Army," in which it was suggested that the Central Medical War Committee should be utilised after the war. Here it is:—

A Quotation.

"ONE of the weaknesses of the medical profession has been its lack of organisation. Its voice in public matters has been weak, and its counsels have often been divided. From this cause the public and the public health have suffered. Is it too much to hope that organisation will not merely be for war purposes, but that it will lead to new conditions? The days of rigid individualism are ended. Doctors must come out into the open, and must address themselves to a world for the health of which they are responsible. They have many evils to fight—the evil of infant mortality, the milk evil, the scavenging evil, the venereal disease evil—and they will only fight these successfully when they take the public into their confidence. Meantime, the confidence of the public is largely enjoyed by quacks. Unorganised, the profession must shun publicity because of its natural and proper fear of self-advertisement, but organised it need no longer shun it. In the light the quack perishes. The time has come to defeat superstition with truth, and to enlist public sympathy for the great aims of modern medicine. Here, then, in the shape of this new medical organisation, a new opportunity presents itself."

Its Meaning.

WITH the sentiments and reflections expressed in this quotation we must all agree. It expresses the situation admirably. But it is not very difficult to read between the lines an appeal for a re-rally to the British Medical Association, a body which is seeking to rehabilitate itself by taking credit for the more or less successful organisation of the profession for war purposes. But the profession has had enough of the British Medical Association, and not all the King's horses and all the King's men will ever put the Humpty Dumpty together again. If medical men have agreed to make the work of the Central Medical War Committee a success, they have done so in spite of the fact, and not because of the fact, that the Committee was born of the British Medical Association, which sold them for a mess of pottage over the Insurance Act. Medical men must organise; but with the Central Medical War Committee after the war, or with the

British Medical Association at any time, they must have nothing to do. The British Medical Association has blundered us into complete and ignoble impotence on more than one occasion. It must never be allowed another opportunity of so doing.

State Medical Service.

I have already pointed out in these columns that there is a strong case for the establishment of a State medical service. Such an idea is discernible in the above-quoted paragraph from the *Times*. The question is discussed whenever two or three are gathered together, and it is quite certain that as soon as the pre-occupations of the present crisis permit a move will be made in that direction. In principle, a State medical service has much to recommend it; but a thing which is excellent in principle may be altogether detestable in practice unless the details are freely negotiated and equitably arranged. Now, it is quite obvious that there can be no such thing as freedom of discussion or equity of arrangement if one of the parties is from the outset obliged to submit to any terms which the other chooses to impose. And that will be the position of the Medical Profession *vis-a-vis* the Government if the latter formulates its proposals before the profession is sufficiently well organised to present a firm and united front to proposals which it may deem unjust. The moral of this is that we must set about organising, and set about organising at once. The enemy is busily engaged upon sapping and mining operations, and unless we are prepared with a counterblast there is nothing but an inglorious and unconditional surrender before us.

Medical Women.

One of the known subterranean manœuvres, which is being freely commented upon, is the ill-concealed endeavour to "rush" the profession by swamping it with women. The idea is, by this means, to drive a female wedge into any defensive male organisation. From what I know of women doctors, this scheme is very unlikely to succeed. Women have honourably fought for, and as honourably attained to, a position of practical equality with men inside the profession, and I think it most improbable that they will consent to jeopardise the fruits of their hard-won battles, and forfeit the recognition and respect of their male colleagues by betraying their "cloth" for a few inadequate pieces of Government silver. My own experience teaches me, on the contrary, that women doctors are exceptionally loyal colleagues, and I believe that they would eagerly join any organisation whose object was the defence of medical rights and the furtherance of medical interests. The British Medical Association has failed them, even as it has failed us. We must both look elsewhere.

The Consultant.

And what of the consultant? By setting class against class in the profession, by persistently representing the interests of the general practitioner as essentially and inevitably antagonistic to those of the consultant, the British Medical Association has done its best to estrange the latter, to turn him aside from anything in the nature of cohesion and combination, and unfortunately it has succeeded. This was not wilful wickedness; it was merely the bungling of breedless bounders seeking personal aggrandisement. But the result is the same. The consultant will have nothing to do with an Association which misrepresents and vilifies him, which, if he should decline to conform to its suburban standards, arrogates to itself the right to brand him as guilty of unethical conduct, and which plays fast and loose with solemn pledges given in good faith. Nevertheless, the consultant must not imagine that he and his class are either above or outside the need for organisation. The schemes which are being secretly and surreptitiously hatched for nationalising and sweating the profession include drastic changes in the management and staffing not only of the large general hospitals, but of all hospitals.

The Hospitals.

These institutions will no longer be supported by voluntary contributions; they will be financed by the State, and the State will dictate the terms on which it will be graciously pleased to accept the services of the staffs. To throw dust in the eyes of the unwary, there will be talk of payment for services which are now gratuitously rendered; the pay will, of course, be inadequate, but the accompanying conditions of service will be onerous, and the discipline summary. Are the younger consultants prepared to walk into this "bargain" with their hands tied? If not, they must bestir themselves. They must recognise that although we are fighting Prussianism abroad, there is, especially where the profession is concerned, a strong spirit of Prussianism at home, and if they are not prepared to be Prussianised, they must be ready—and able—to resist. The only way in which they can offer any effective resistance is by joining an organisation with the brains and energy to defend their interests. Such an organisation the British Medical Association is not, never was, and now never can be.

I may reasonably be asked what existing organisation there is which can be trusted to do what is necessary. To which my only reply is that I am not at present prepared with a satisfactory reply. On the principle that an empty house is better than a bad tenant, so it seems to me that it is much better that the profession should be wholly unrepresented than that its representation should be in the hands of incompetent self-satisfied noodles. To change the metaphor, a clean slate is preferable to an ill-written phrase; its very barrenness seems to invite and stimulate accurate caligraphy. It is a pity that the Panel Medico-Political Union appears so to have restricted its scope as to exclude those who are not panel doctors. There are other members of the profession who might suitably be included within the fold of its activities. If these cannot be included they ought to consider the propriety of having an organisation of their own. In any case, let them organise. Sinapis.

Dr. Hawkesley Roche Hayes, J.P., of Basingstoke, left £22,055.

MEDICAL ASPECTS OF THE DUBLIN RISING.

Whatever failings there may have been on the part of the authorities both before and during the latest Irish rebellion, the medical and nursing professions have every right to feel proud of their members who were in Dublin in Easter week. Many medical men were absent for a brief holiday when the outbreak occurred, but most of them took whatever means was in their power to return to what they considered their post of duty. As no trains were running into Dublin the journey had to be made by motor-car, or, in some cases, by relays of post-car. Most of those who were in Dublin on Easter Monday lost no time in getting to their various hospitals, where they remained without intermission or release until the following Saturday. Transit through the streets during the week was in all cases dangerous, and in many impossible. One hospital was invested by the insurgents, who kept several members of the staff as prisoners, carrying in their wounded for treatment and removing them immediately, whatever their condition. From Monday to Saturday the various medical staffs worked almost incessantly. Willing hands bore stretchers under the heaviest fire and carried the wounded—soldiers and civilians alike—into safety. Some dead were carried in—many lay unmoved for days. As our readers know, Dublin has ten general hospitals, which are scattered in all quarters of the city. This distribution of the hospitals—which has so often been regarded as a fault—proved a blessing in Easter week, since if the road to one hospital was blocked, it was usually possible to make way to another. The ten general hospitals were supplemented in their work by the King George V. Military Hospital, the Dublin Castle Red Cross Hospital, the various special hospitals which speedily provided beds and threw their doors wide, and by two Red Cross Hospitals equipped and opened with great despatch in Merrion Square and Lower Fitzwilliam Street respectively. It is impossible to suggest any estimate of the number of casualties dealt with during the week. Some two hundred and fifty dead bodies lay in the hospitals at the end of the week, and there were probably at least as many more outside. The casualties must have run into thousands. The majority both of deaths and lesser casualties was probably among harmless civilians who had the misfortune to be resident in the neighbourhood of the strongholds of the insurgents. They suffered severely from the somewhat indiscriminate military measures adopted by the authorities. Even the hospitals had their anxious moments from this cause. One suffered from several rounds of machine-gun fire, the edifice being mistaken for a neighbouring stronghold of the rebels. The workers in another hospital were alarmed at finding a big gun trained on the upper storey of the building, which was erroneously supposed to harbour a sniper. However, as far as we can learn, no medical man nor nurse was injured during the entire disturbance. It is true that ambuiances were occasionally hit by bullet fire from both sides, but this does not appear to have been intentional, and we have heard no evidence of ambulance workers being deliberately fired on. Perhaps the hottest fighting was that in the Northumberland Road area, by which the Sherwood Foresters, on the march from Kingstown, were permitted to approach the city by the only entry on the south-eastern side, which was in the hands of the rebels. The area involved is equidistant from the City of Dublin and Sir Patrick Dun's Hospitals, and these institutions had their resources thoroughly taxed. No praise is too high for the bearers, medical and lay, who exposed themselves time after time to the hottest fire in their search for the wounded. In particular, the nurses of Sir Patrick Dun's Hospital deserve special mention. When, owing to darkness, men-bearers were unrecognisable and were fired on, the nurses, time after time, ran out with stretchers and carried in the wounded. The workers in Jervis Street Hospital suffered many anxious moments, not only from the firing which for days was incessant, but from the danger of fire. The immense fire which has devastated Sackville Street—one of the finest thoroughfares in Europe—crept gradually nearer and nearer to the hospital, which was overwhelmed with showers of sparks. It was not till Saturday that the cessation of the fire gave relief to the inhabitants of the hospital. For the whole week the Royal College of Surgeons was in the hands of the insurgents. We are glad to hear that no wanton damage was done, and the building and equipment suffered little.

CURRENT TOPICS.

Shakespeare and Medicine.

The past week has seen the celebration of St. George's day, which is also the anniversary of the birth and death of Shakespeare. On that day, 300 years ago, died "the greatest intellect who, in our recorded world, has left record of himself in the way of Literature." So writes Carlyle. In a week when universal tribute has been paid to Shakespeare's memory, on the tercentenary of his death, it was fitting that the medical profession should fall into line, and that it should be shown that the "myriad-minded man" may be classed as a master of medicine.

We welcome, therefore, the choice of orator and subject for the 141st annual oration of the Medical Society of London. Scientist and scholar, Sir St. Clair Thomson is eminently fitted to deal with such a subject as he selected for his oration on May 1st, viz., "Shakespeare and Medicine." The address displays a wealth of erudition and a felicity of expression which stamp the orator as a worthy spokesman of a liberal profession.

Sir St. Clair referred to the common-place book of the Rev. John Ward as showing that Shakespeare died of one of the low fevers prevalent at Stratford-on-Avon after a river flood, modern sanitation being unknown. He explained the poet's great grasp of medicine by his profound knowledge of life and human nature. In Shakespeare's time, medical science was but emerging from the chaos of unlicensed and irregular practice, and the marriage of his eldest daughter, Susanna, to Dr. John Hall, of Stratford, afforded his keen observation the requisite opportunity to

note the habits and ways of thought of medical men. Quacks, male and female, flourished then as now, and such practice was indeed encouraged by the fact that the regular physician was apt to cease attendance on a case he considered incurable, to save his reputation. Physic failed to minister to a mind diseased, to pluck from the memory a rooted sorrow, and to raze out the written tablets of the brain (Macbeth), and an allusion to auto-suggestion may be read into the recommendation of the patient to "minister to himself."

The works of Shakespeare contain references to ague, rheumatism, plagues, pestilence, fever, measles, "the sweat," leprosy, apoplexy, bone-ache, colic, consumption, convulsions, cramps, dropsy, ecstasy, epilepsy, gout, green sickness (chlorosis), heartburn, hemiplegia, hydrophobia, itch, jaundice, palsy, sciatica, sea-sickness, somnambulism, and visual spectra.

The poet shared the common belief that vital spirits dwell in the arteries, and that wound trouble is attributable to the access of air, an interesting observation regarding sepsis which recalls Lister's carbolic spray. His references to the circulation of the blood (in "Hamlet" and "Measure for Measure" notably) are prophetic, seeing that Harvey did not reach his famous conclusion until a week before Shakespeare's death. The social disease on which a Royal Commission has recently reported was known in Shakespeare's day variously as "the French disease," and "the Neapolitan disease." Great as was his belief in the benefits of fresh air, he still regarded night air as harmful:—

"And will he steal out of his wholesome bed
To dare the vile contagion of the night."

The passage in "Macbeth":—

". . . Macduff was from his mother's womb
Untimely ripp'd,"

seems to indicate the practice at that time of Cæsarean section.

Shakespeare was deeply interested in mental pathology. He shows surprising knowledge of the mental confusion preceding an epileptic attack, and of the ensuing maniacal excitement. He alludes to the value of music in sickness, but hints the influence is not always beneficial, for he states that enuresis may result from the sound of the bagpipes. We believe this is not unknown in enemy ranks when Scottish regiments get to work. And the untutored Southron says there is no music in the bagpipes! The genius of our greatest Englishman is clearly revealed in his insight into mental and nervous disorders, as witness the neurasthenia of Hamlet, the melancholy of Jaques, the coxcombry of Malvolio, the hallucinations of Macbeth, the insane ambition of Lady Macbeth, the insanity of Ophelia, the maniacal misanthropy of Timon of Athens, the blind fury of Othello, the frenzy of Constance, the mania of King Lear, and the foolish imbecility of Simple, Shallow, and Speed. In "As You Like it" we get a good idea of the way in which bad cases of madness were treated (the mild cases were not segregated):—

"Love is merely a madness, and, I tell you, deserves as well a dark house and a whip as madmen do."

In "Much Ado about Nothing" we find a foreshadowing of the principles which underlie the modern and kindly treatment of the mentally afflicted:

"Fetter strong madness in a silken thread,
Charm ache with air, and agony with words."

Mr. Stephen Coleridge will be interested in Sir St. Clair Thomson's statement that vivisection is proposed by a woman, the Queen, in "Cymbeline."

The orator concluded: "The science of medicine progresses, but human nature remains the same. Shakespeare's plays will be read by physicians when every medical treatise of the present year will have been completely eclipsed."

The address is a worthy exposition of the medical knowledge of that master mind aptly described by the Sage of Chelsea as "an eye for us all, a Heaven-sent bringer of light."

Daylight Saving.

IT is difficult for the ordinary man to understand the opposition which the daylight saving proposal appears to have excited in some quarters. It is, of course, obvious that an essential to the success of the scheme is that it should be universally adopted—and simultaneously. Imagination reels at the state of chaos which would ensue if these conditions were not observed. But, given their observance, the scheme seems to us not only free from disadvantages, but full of benefits. The commercial and economical aspects of the matter have been sufficiently exposed in the lay press; we are concerned here with the medical and hygienic. That daylight, especially bright sunlight, when admitted into rooms has some health-giving properties, or rather disease-preventing powers, is well known, and it is obvious that daylight saving will give a larger field to these beneficent activities. Oculists have agreed that artificial light is much more trying to the eyes than daylight, so that the "saving" proposal, if adopted, will save not only the use of electricity, gas and oil, but also the strain on the eyes of workers. Another aspect of the matter is provided by the psychical effect of working by day rather than by night. There is a sub-conscious feeling that so long as daylight lasts work should last, that when daylight fails, work should cease. Work done during daylight is therefore in most cases better done than work done by artificial light. A doctor's work is never done, but even he is human enough to prefer that his work should be done by the light of Heaven rather than by that which comes from a "main."

War Surgery in Germany.

THE second war conference of German surgeons has just been held in Berlin, the first having taken place a year ago in Brussels. The President, Prof. von Schjerning, discussing the achievements of the past year, put first the "entire disappearance" of tetanus. He was enthusiastic with regard to the results of fractures, claiming that they had established a regular treatment—we take this to mean a routine treatment—which avoided joint stiffness. He emphasised the importance of prompt medical attention, and said that especially in trench warfare German surgeons were able, even in the front line, to deal better with scalp and abdominal wounds. Life often depended on prompt surgical interference at the front. The Professor went on to repeat—what has been received with scepticism by many medical authorities—the German official statement that 86.6 per cent. of all the men treated in field hospitals, and 90.1 per cent. of all the men treated in hospitals in Germany, are able to return to service. He asserted that the death-rate is "only 1.5 per cent. of the wounded and sick." He gave the number of Army nurses as 6,800.

Flies and Refuse Heaps.

A DISCUSSION on the above subject was opened by Dr. W. H. Symons, medical officer of health, Bath, at a meeting of the Royal Sanitary Institute, held in that city on April 15th.

Dr. Symons showed how it had been proved that flies were responsible for the spreading of typhoid

fever, infantile diarrhœa, and enteritis, and said they had therefore to wage war against flies in times of peace as well as in wartime. Descriptions were given of many experiments, to ascertain the effects of chemicals in keeping down fly life. He considered there was little danger from a well-packed manure heap if it was not near milk or other food, but where manure was loosely packed and exposed to weather on the roof of a shed or in a yard, so that it might be partially freed from filth and used again in the stable, there was great danger to the public. Yet that practice was permitted in some towns, and one could see the manure so exposed as one passed along public thoroughfares.

Dr. M. Harper, medical officer of health, Bath rural district, said until the authorities gave them the power to act they could do very little in the matter. There was no order to have stable manure removed every seven days, and there ought really to be laid down some rule as to what should be done to abate that nuisance. Open dustbins should not be permitted. The treatment of garbage was defective, the mixing of liquid and dry together being harmful. Owing to shortage of labour, there was difficulty in getting refuse removed, and until incinerators were adopted he feared they would not do much to combat the fly peril.

Professor Kenwood described the anxiety of the Army Medical Advisory Board with respect to the fly peril in France and Belgium, where the system of intensive manuring was conducive to fly breeding, and said all the information available for methods of keeping flies under was collected. Touching on Dr. Symons' experiments, he said the use of borax on manure heaps probably did check fermentation, and this made the heaps unsuitable for the breeding of flies. Borax also did not destroy manurial value.

In reply, Dr. Symons said he did not think the application of borax to manure heaps checked fermentation for more than one day.

Tuberculosis in Hertfordshire.

In his annual report for 1915 the county of Herts tuberculosis officer, Dr. H. Hyslop Thompson, states that the result of the war has been to postpone the erection of the county sanatorium and hospital, and to interfere with the complete organising of the scheme for dealing with tuberculosis within the county. The dispensary system now consists of five dispensaries and nine visiting stations, and provides means for the diagnosis of the disease, for the spread of knowledge with regard to the prevention of infection, and for the treatment of early and quiescent types of the disease. One definite result of the dispensary system, with the facilities which it offers for the examination of sputum, is that cases of tuberculosis are now detected in a much earlier stage of the disease, and an increase in the proportion of early cases which come under treatment is therefore one of the first results to be obtained. The accommodation available for the sanatorium treatment of insured patients has been restricted owing to financial considerations, but notwithstanding 161 insured patients have received sanatorium treatment during 1916 some increased accommodation will in all probability be available. The postponement of the erection of the county sanatorium and hospital has called for the consideration of measures to be adopted for the provision of hospital treatment of acute and advanced cases of pulmonary tuberculosis. Such accommodation is most essential if preventive warfare against the spread of the disease is to be efficiently carried out. The County Council has brought forward a scheme for renting and equipping a suitable house to provide accommodation for those for whom hospital treatment is most urgently required. During the continuation of the war and for some time after its termination it will be necessary to conserve efforts in connection with tuberculosis round the dispensary and tuberculosis hospital, as it is important to hold the balance equally between the requirements for treatment and the call for prophylactic measures.

Pensions for Army Nurses.

We note with satisfaction that a Royal Warrant published on May 4th with Army Orders, contains particulars of provision for members of Queen Alexandra's Imperial Military Nursing Service in the event of their being disabled during the war. A member of the service who has become disabled may be granted a pension at not less than the following annual rates:—If the earning capacity is totally destroyed, for a principal matron or matron-in chief, £60; matron, £50; staff nurse or sister, £40; if seriously affected, the rates are respectively for the grades mentioned £50, £40, and £30; when impaired only, the rates specified are respectively £40, £30, and £20. In cases of slight impairment, a gratuity not exceeding a year's pay may be granted on retirement, while a totally disabled member who has sufficient service for pension may be granted, in addition to that pension, the following annual sum:—Staff nurse or sister, £15; matron, £20; principal matron or matron-in-chief, £25; but the pensions shall not in any case exceed the maximum pension of the rank.

PERSONAL.

Dr. Percival S. Hay has been elected honorary ophthalmic surgeon to the Sheffield Royal Hospital, in succession to the late Dr. Stanley Riseley.

The death is announced, at Chertsey, of Harriette Anne, widow of Thomas Henry Wakley, F.R.C.S., for many years editor and part proprietor of the *Lancet*.

Dr. Macdonald, the Northampton School Medical Officer, has enrolled for war service if emergency demands, and his appointment is to be kept open for him.

Sir Richard Havelock Charles, M.D., F.R.C.S.I., Sergt.-Surgeon to H.M. the King and President of the Medical Board of the India Office, has, at the request of the Secretary of State for India, accepted an invitation to become Dean of the London School of Tropical Medicine.

We learn that certain adverse rumours concerning Dr. Maurice Hayes, Hon. Secretary of the Irish Medical War Committee, were in circulation in Belfast, and probably in other parts of Ireland, last week. Dr. Hayes was spending Easter at Newcastle, Co. Down, when the rebellion broke out in Dublin. He returned to Dublin with all speed, and was engaged in the Mater Misericordiæ Hospital for the rest of the week, giving attendance to the wounded. He is not related to any other Dr. Hayes in Ireland.

Mr. James Murray Tulloch, of Otford, Kent, left £500 to the Scottish Hospital in London, to be payable on the death of his wife.

Mr. Alfred Reckless, of Sheffield, retired surgeon, at one time President of the Sheffield Medico-Chirurgical Society, and House Surgeon at the Liverpool Dispensary, left £23,672.

FRENCH CLINICAL LECTURE

ON

OCULAR SYMPTOMS IN NEPHRITIS.*

By PROFESSOR F. WIDAL,

Of the Faculty of Medicine of Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

HERE is a woman, æt. 70, who comes to us with an interesting clinical history. This I shall describe to you in some detail, and no doubt it will strike you as simple enough, but I would remind you that not so many years since it would almost certainly have been correctly interpreted.

She is sent to us by an oculist whom she recently consulted on account of certain troubles with her eyesight. She complained of sight being "misty," as if she were peering into a fog, or, to make use of her own expression, as if she were looking through a veil. This disturbance of normal vision had been troubling her for some time, but it became more pronounced about six months ago, since which date it has steadily got worse. The oculist, on examining the fundus, saw traces of retinal hæmorrhage, and at once came to the conclusion that there must be renal disease, so he advised her to come to this hospital.

It is only a comparatively short time that we have learned to connect certain disturbances of the ocular apparatus with a constitutional disease, and the credit of having elucidated the bearings of nephritis on retinal semiology belongs in great measure to the French school. The diagnosis is based, partly on the ophthalmoscopic appearances and partly on the pathogenic division of the particular variety of nephritis.

As you are aware, it is now customary to classify cases of nephritis in three groups—(1) the hypertensive, (2) the chloridæmic, and (3) the azoturic.

Now, if you feel this patient's pulse, you cannot but be struck by its volume. By means of the Pachon sphygmomanometer, we find that the blood-pressure is 110 minimum and 280 or 300 maximum. The heart is very big, and its apex, much lowered, is found in the sixth interspace, beating strongly and forcibly, as shown by the pulsation of the thoracic wall. On percussion we find a vertical increase in the area of cardiac dulness, but no "gallop" sound on auscultation. These are all the signs of heightened blood-pressure that can be elicited.

The patient does not complain of any tingling in the limbs, though she displays some very similar phenomena. For the last two years she has suffered from cramp in the calves. Though she does not seem to get typical "dead finger," she has, however, noticed on awakening a certain numbness of the right hand, but this may conceivably be due in some measure to retraction of the palmar fascia which is present on this side.

No other signs of renal disease are present, and in particular she does not suffer from headache. It is true that she used to have sick headache when younger, but, as she says, it is now a long time since she has been troubled with anything of the nature of a headache.

We find, however, that there is some degree of pollakiuria, of frequency of micturition, most marked in the morning on getting up. She passes rather a lot of urine, probably about three pints in the twenty-four hours. The urine contains about 2.25 gm. of albumen per litre, with a few granular casts.

There are no tangible signs of chloridæmia. At most, about six years ago, did the patient notice that for two or three days her face was puffy, but it was fugitive, slight, and did not amount to much; then, too, there has been no repetition of the occurrence. Her eyelids are never puffy, nor is there any swelling of the lower limbs even when she is tired.

We may add that there is no sign of azotæmia. Her appetite is good, she is never sick, and suffers from neither somnolence nor itching. Her mental state is quite normal, she concentrates her attention on our remarks, and replies normally to questions.

We have ascertained that each litre of blood serum contains 57 centigrammes of urea. Ambard's constant is high—*e.g.*, 0.16.

Her personal history comprises an attack of measles when 20 years of age, after which she remained in good health until she reached the age of 58. Something happened at this juncture. The patient became very thirsty, and this led to her urine being analysed, whereupon it was found to contain 28 grammes of sugar per litre. At this time she was passing two litres of urine daily.

It was therefore a mild case of diabetes, to the extent of passing 60 grammes of urinary sugar in the twenty-four hours. Recent analyses, however, failed to reveal the presence of any sugar, and to-day's analysis shows merely a faint trace.

Four years ago she noticed that her sight was becoming impaired. This might be due to incipient bilateral cataract or to presbyopia. She was given spectacles, which improved matters somewhat, but for a year past her visual troubles have steadily got worse. At the present time she can barely read the newspaper—in fact, she can only make out the title. The gradual loss of visual acuity led her to consult an oculist, who found traces of retinal hæmorrhage. The patient, by the way, complains of occasional attacks of giddiness.

We find, then, in this case, certain well-marked symptoms of heightened blood-pressure, without chloridæmia or signs of azotæmia. In arriving at our prognosis, we can safely put aside the diabetic episode that dates twelve years back, when she was 58 years of age, because it only amounted to a slight, mild attack of glycosuria, such as we often meet with in elderly persons. Moreover, it seems to have altogether disappeared, since there is now not much thirst, and the test for sugar only gives a trifling reaction.

We are dealing, then, with a patient complaining of visual disturbances, which have been especially troublesome during the last six months. The disturbance consists in the fact that the patient sees objects "as through a glass darkly," and it is steadily getting worse.

She is 70 years of age, and, speaking generally, in pretty good health, though rather run down and short of breath, but she never suffers from palpitation. The heart is very forceful, but there is no galloping sound, even when the patient exerts her-

* Lecture delivered at the Hôpital Cochin.

self; no trace of œdema. There is nothing wrong in the liver or lungs.

She does not complain of feeling ill, she has a good appetite and is in good spirits. Symptomatically, the only thing that is wrong with her is failing eye-sight. The ocular symptoms consist of neuro-retinal hæmorrhages, hæmorrhagic neuro-retinitis, and this put us on the track of her albuminuria. For that matter, the patient became aware, four months ago, that her urine contained albumen, since this had been noted in the course of the analysis of the urine for diabetes. In this case the albuminuria is well tolerated since, apart from the eye trouble, the patient presents no signs of Bright's disease.

It behoves us to carry the ophthalmological examination a step farther, in order to ascertain whether she presents any white patches indicative of retinitis. That is a thing always to be looked for in such cases. When a patient presents the signs of hæmorrhagic neuro-retinitis we know that he has bright's disease, and if, in addition, we find the white patches of retinitis it is evidence of azotæmia. Hæmorrhage alone merely shows high blood-pressure.

The ocular symptoms enable us to differentiate the various forms of nephritis, hypertension, azotæmia, and also chloridæmia. This is the rarest, but it is sometimes met with. I recently saw such a case in a lad suffering from acute nephritis. The eye is congestive, œdematous.

It may not be without interest to remark that hypertensive nephritis, which gives rise to retinal hæmorrhage, is often associated with other hæmorrhages, such as epistaxis and cerebral hæmorrhage. Chloridæmia, which can be recognised in the fundus by œdema of the papilla, also causes œdema in other parts of the body.

In such a case as this we must look for albumen, but this is not all. We must examine the patient from the threefold point of view—chloridæmia, hypertension, and azotæmia. Inasmuch, however, as this patient has never had œdema in any part of the body, we can dismiss the question of chloride retention. Nor does she seem to have presented any of the signs of hypertension, except, perhaps, a tendency to cramp in the calves. We have, however, only to feel her pulse to be made aware that it is in very pronounced hypertension. As a matter of fact, Pachon's instrument gives 300 mm. maximum and 110 mm. minimum. You see then that there is a tremendous difference between the minimum and the maximum, just as there is in aortic subjects. This hypertension alone would explain the retinal hæmorrhage, but as there is a suspicion of white patches of retinitis we must also look for azotæmia.

She does not present any functional disturbances which would lead us to suspect azotæmia; the appetite is good and her mind is quite clear. But we find that she has 0.56 gm. of urea per litre of blood serum, and when we obtain this result at a first examination, it should lead us to make further observations in order to find out whether the mischief is progressive. Ambard's constant is not always or necessarily of much significance. It possesses particular interest to us precisely when the proportion of urea is only slightly above the normal. When this is the case, the constant is enough to decide the question in one or the other direction. In the case under consideration this constant is very high, so that it points to azotæmia.

But the result of ocular examination must confirm that arrived at by chemical means. The fundus may afford convincing evidence of incipient azotæmia as yet only producing uncertain chemical changes.

When a subject of Bright's disease only has from 0.57 to 0.60 centigrammes of urea per litre of serum this may be taken to indicate commencing azotæmia. Whether it is going to be progressive, culminating, in three or four months, in major azotæmia, is a question that can only be answered by repeated examinations of the blood.

When we find white patches of retinitis, even should there be not more than 0.57 centigrammes of urea per litre of serum, we are in a position to assert that the patient is azotæmic and that the azotæmia is likely to prove progressive.

It is of the greatest interest to know this relationship between azotæmia and retinitis. Not only may we meet with retinitis in pronounced cases of azotæmia with 3 or 4 grammes of urea, which mark the terminal phase, and in less marked cases in which we get 1 or 2 grammes, but even in incipient cases of azotæmia.

So far, this interpretation of the significance of azotæmia has never been belied. Retinitis is the symptom which betrays the certain advent of progressive azoturia at a stage when it may be practically impossible to obtain any chemical evidence of its presence.

If we only get retinal hæmorrhage, then no conclusion can be arrived at in respect of the azoturia, because the very marked hypertension displayed by this patient of ours *per se* suffices to explain much. The prognosis depends entirely on the result of examination of the fundus of the eye.

The physician cannot be of service to his patient, or hope to formulate a trustworthy prognosis unless he be familiar with the valuable information to be drawn from examination of the eye in Bright's disease. This statement is borne out by the case before us, for the woman presents no flagrant symptoms: œdema or pronounced visceral disturbances; in fact, she is leading her ordinary life, and only came to consult on account of a veil before her eyes. To ascertain whether her state is due purely to hypertension, or to azotæmia as well, no evidence is more convincing than that drawn from examination of the fundus, because chemical examination does not enable us to say whether or not she is the subject of progressive azotæmia. Confirming, as it does, the results of chemical examination, the ocular examination enables us to conclude that it is a case of commencing progressive azotæmia, and this even had no examination of the blood been made.

As for treatment, we shall apply the usual treatment for hypertension:—

Nitrate of soda 1 gramme.
Spirit of lemon 2 grammes.
Water 3 grammes.
Simple syrup 100 grammes.

A teaspoonful night and morning for ten days.

At the same time lactate of strontium 2 grammes a day, to control the albuminuria, and in presence of white patches of retinitis give 20 drops of tincture of squill daily during the ten days following the administration of nitrate of soda.

Willesden Guardians have refused to grant a licence for a home for babies to be fed on milk from goats kept on the premises.

Mr. Henry Smail, of Donhead Lodge, Wimbledon, left £1,000 each to the Wimbledon Hospital and the Nelson Hospital.

Dr. Herbert Williams, Medical Officer of the Port of London, left £7,363.

There are four British Red Cross units in different sections of the Italian lines.

ORIGINAL PAPERS.

THE TREATMENT OF BACKWARD DISPLACEMENTS OF THE UTERUS.*

By FREDERICK J. McCANN, M.D.EDIN., F.R.C.S.ENG.

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INTRODUCTION.

DISCIPLES of the Healing Art are not infrequently taunted by the laity that their treatment of common ailments is far from satisfactory.

That this is true to a certain extent cannot be gainsaid, for what is of common and everyday occurrence seems not to stimulate the ardour of the scientific investigator who looks further afield to discover amidst the rarer morbid processes some fruitful source of enquiry. There is a tendency, too, in clinical work, to spend more time and thought over what are termed "interesting cases," and to treat common ailments on a routine plan. Yet such ailments are all important to the patients, the more so because of their frequent occurrence.

Backward displacement of the uterus is a common ailment which, from its frequency and importance, demands the closest investigation and study in order to decide what measures of relief may be afforded to the unfortunate sufferer.

Happily, the treatment has markedly improved in recent years owing largely to the advances made in gynæcological surgery, and to a better understanding of the causation and sequelæ—so that women can now be promised a restoration to health, which was not attainable in former years.

When a backward displacement is discovered it is necessary to determine the cause, for this often affords important guidance to correct treatment.

CONGENITAL DISPLACEMENT.

The displacement may be congenital, for it has been discovered in the newly-born.

I have found undersized retroflexed uteri not infrequently amongst Polish Jewesses of the hospital class, who seek treatment for sterility, and in whom there were no symptoms pointing to any uterine trouble.

The association of under-development of the uterus, anteflection, dysmenorrhœa and sterility is well known, but I have rarely found small-sized retroflexed uteri amongst British women. Such examples represent the true congenital backward displacement, and although fully developed uteri, displaced backwards may be found in young girls, it is more than probable that the displacement is acquired. In another type met with in the newly-born the cervix is much elongated, the uterine body small and the organ is retroverted; and in yet another type the uterus is retroverted and anteflexed. Needless to say, unless symptoms result, no treatment is indicated.

EXCESSIVE UTERINE MOBILITY.

Again, excessive mobility of the uterus may be encountered, so that it may at one examination be found displaced backwards and at another occupying an anterior position.

TRAUMATIC DISPLACEMENT.

The part played by traumatism in the production of backward displacement has been variously estimated from time to time, but from a close study of this subject I have come to the conclusion that in the causation of backward displacements in virgins and nulliparæ and in parous women, too, the possibility of traumatism as an ætiological factor must constantly be borne in mind.

I have seen backward displacement of the uterus result from accidents in the hunting field, falls on the buttocks, strenuous exercises at school, and recently after strenuous "war work."

When the extreme mobility of the normal uterus is remembered it is indeed surprising that this accident does not happen more frequently. Yet it is stated to be very rare and has even escaped mention by many writers.

The acute displacement is an example of a true intraperitoneal hernia in which the body of the uterus becomes incarcerated in the pouch of Douglas.

The symptoms suggesting the possibility of an acute traumatic backward displacement may be thus briefly summarised.

Pain is referred to the lower sacral region and coccyx. If the woman attempt to stand there is slight nausea and vague distress in the epigastrium. Pain is often localised over the sacro-iliac synchondrosis or down the sciatic nerve. Defæcation may be painful, and headache, generally occipital in type, may be a prominent symptom. Added to these there may be distressing vesical irritability whilst the menstrual type becomes altered. Uterine hæmorrhage may follow the accident or menstruation becomes painful, prolonged and too frequent. Amenorrhœa has been noted. If treated promptly there is no change in the menstruation. There is a characteristic posture and gait like traumatic lumbago. The shoulders are stooped forwards, the head carried slightly forwards, the dorsal and lumbar portions of the spinal column being held in a position of slight kyphosis.

The treatment consists in replacing the uterus under anæsthesia followed by rest in bed for at least a fortnight.

The majority of backward displacements in virgins and nulliparæ are, however, encountered in what may be termed the chronic stage.

TREATMENT OF BACKWARD DISPLACEMENTS IN VIRGINS.

When symptoms suggesting some pelvic disorder are met with in a virgin a recto-abdominal examination, preferably under anæsthesia, should be made. If a backward displacement be discovered it is necessary to determine whether the displacement alone is the cause of the symptoms. A careful abdominal examination should be made to make sure that there is no visceral ptosis (stomach, intestine or kidney) at the same time noting the condition of the abdominal wall and the general muscular development.

If the woman be of the thin neurotic type exhibiting various so-called reflex nervous phenomena, pains of various kinds, fatigue after slight exertion, gastric troubles, and constipation with feeble muscular development and visceral ptosis, the uterine trouble is only a small part of her disease and treatment by pessary or operation will do little good.

For such women local treatment should be avoided and massage, exercises, fresh air and appropriate employment will be most helpful.

For those in whom the displacement is not associated with visceral ptosis I believe surgical treatment affords the greatest relief.

It is often urged that the woman should be told to forget about her displacement, or if it is not causing marked symptoms, it should be left alone, or if discovered accidentally the knowledge should be withheld from her, or, again, she may be told she is neurotic and fanciful, when her sufferings are very real. Indeed, much depends on the attitude the medical attendant adopts when confronted with disorders of this kind.

* A paper read before the Harveian Society, April 13, 1916.

That a backward displacement of the uterus has a profound influence on a woman's health and well-being is evident from the extraordinary benefit which follows its cure by operation. And although in my earlier days I approached this subject with a sceptical mind, I am now convinced of the far-reaching effects produced by a backward displacement, and can fully credit the importance given to this subject by our medical forefathers.

Further, it is frequently advised that nothing should be done if symptoms are absent. To this I reply that sooner or later a backward displacement will cause symptoms, and that as a spontaneous cure is not to be expected, the sooner the displacement is remedied the better for the patient.

Apart from prevention, the trend of all modern treatment is to apply the remedy in the early stages of disease in order that the malady may be effectually checked. The same principle should therefore be applied in the treatment of backward displacements.

The modern gynæcological surgeon has had the great advantage of being able to inspect the pelvic organs through an abdominal incision and so obtain a knowledge of living pathology which was denied to his forefathers, who relied solely on clinical or *post-mortem* evidence.

From actual inspection on the operating table I have satisfied myself of the frequency with which tubal inflammation accompanies a chronic backward displacement, how the appendages become congested and adhere to neighbouring bowel or pelvic peritoneum, and how the uterine body becomes enlarged and congested.

It is assumed by some writers that the uterine congestion is due to the body of the uterus being gripped by the peritoneal folds bounding Douglas' pouch. I have paid some attention to this subject by observing the actual conditions when the abdomen was opened. I have seen the uterine body deeply congested, dark, purple in colour, on many occasions lying perfectly free from the folds of Douglas, and also uteri whose colour closely resembled the normal being "gripped" by these folds. Moreover, these folds are easily stretched, and the distance between them varies considerably in different individuals whilst child-bearing exerts an important influence.

I believe the uterine congestion is due to the torsion of the broad ligaments tending to retard the venous return, and that where this congestion is only slight in amount, the torsion is not so marked and the circulation better able to accommodate itself to the altered conditions. Needless to say, when the uterus is infected another factor comes into play.

Slow and insidious changes occur in the uterus and appendages, which sooner or later will cause symptoms both local and general.

For all these reasons a backward displacement should not be left alone, but should be promptly remedied.

In a virgin it is much better to remedy the displacement by an operation than to introduce a pessary. It is surely better for her to have a neat abdominal scar than a torn hymen and a stretched septic vagina.

Treatment of Backward Displacements in Nulliparæ.

In the nulliparous married woman the problem is a little different, for should she become pregnant this may lead to the cure of her displacement. Unfortunately, however, although pregnancy may occasionally occur in a uterus displaced backwards, as a rule the displacement hinders conception, and for this reason the woman may present herself for examination.

When an examination is made and a backward displacement is discovered, then the mobility of the uterus should be tested.

Can it be replaced into the normal position, or is it fixed?

A useful clinical division of backward displacements is into three classes:—

1. Those in which the uterus is replaceable without anæsthesia.

2. Those in which the uterus is replaceable with anæsthesia.

3. Those in which the uterus is fixed.

The uterus may be movable to a certain extent without being replaceable in its normal position. Such movement is permitted when the adhesions are not numerous and are filamentous in character. Again, the woman may resent any attempt at moving the uterus owing to the tenderness of the uterine body or the prolapsed appendages. Such uteri are readily replaced under anæsthesia. If, in addition to tenderness, the adhesions are numerous and strong, the uterus remains fixed even under anæsthesia.

To determine if the uterus be replaceable is the first step in treatment. If replaceable, treatment by pessary may be tried, whilst if the uterus be fixed a pessary will cause pain through pressure on inflamed or sensitive structures.

Method of Replacing the Uterus.

(*a*) *Bi-manual Replacement.* The uterus may be replaced by the internal fingers pressing the fundus upwards and forwards until it is further assisted by the external hand, the internal fingers being then used to press the cervix backwards and upwards.

(*b*) *Replacement by the Aid of the Vulsellum.* Where there is difficulty in carrying out bi-manual replacement the anterior lip of the cervix should be seized with a vulsellum and the uterus pulled downwards and then the cervix pushed upwards and backwards thus causing the fundus to rotate forwards. As a rule, this alone will suffice, but if there be any difficulty the finger or fingers may be used in addition, to push the fundus forwards.

(*c*) *Replacement by the uterine sound.* The usual method recommended is replacement by means of the uterine sound. With the sound you may infect the uterine cavity, you may perforate the fundus, or you may produce abortion in a gravid uterus. For all these reasons the sound should be avoided. Nothing can be more reprehensible than the repeated straightening of the uterus by means of the uterine sound, for the risks of infection are very real and tubal inflammation may follow.

Treatment by Pessary.

Having replaced the uterus, it is maintained in position by a pessary. The capacity of the vagina will have been gauged by the former examination and a pessary of suitable size should be selected or a cast of the upper portion of the vagina may be taken by means of a thin rubber ring previously immersed in boiling lotion to make it soft, and a pessary of corresponding size can be procured, or, if necessary, made.

The most suitable variety of pessary is the Hodge or Albert-Smith, made of hard glass or vulcanite. It should be introduced in the antero-posterior diameter of the vulva, the index finger pressing the upper bar backwards and upwards into the posterior fornix. The pessary should be grasped by the vaginal vault and should not cause pain or discomfort. Before leaving the examination couch the woman should be asked to "bear down,"

in order to see whether or not the pessary can be pressed out.

It is well to request her to report herself in three or four days to ascertain if the pessary is causing any pain or interference with micturition or defæcation.

During the wearing of a pessary a daily vaginal douche is necessary, and for this purpose warm saline solution is usefui as it does not interfere with conception.

The pessary should be changed every two or three months when the opportunity may be taken to see if its use may be discontinued or if a smaller or larger size be required.

When asked the question, "How long has the pessary to be worn?" the answer is until the uterus can maintain itself in the normal position. That may be months or years, or it may never maintain itself in the normal position.

Women are often told that they will be cured at the "change of life." This is true when the uterus becomes smaller and the upper portion of the vagina contracts, or when, from an increased deposit of fat, the retentive power of the abdomen is increased. But in parous women with a relaxed vagina and a gaping vulva the condition becomes worse.

I think, therefore, that the prospects of pessary treatment should be put before the patient and let her decide whether she will endure the inconvenience of wearing a pessary or have surgical treatment.

A vaginal pessary is an unclean thing, requiring constant attention, and as it acts by stretching the vaginal vault, it is in reality favouring the condition it is supposed to remedy, and as cures by pessary treatment are not numerous, I believe the interests of the patient are best served by advising appropriate surgical treatment. Moreover, the social status is an important factor, for the hard-worked woman has not the time to give the attention and care which treatment by pessary demands.

The uterus may be found tilted slightly backwards in association with a congenital hypertrophic elongation of the cervix, a condition frequently mistaken in practice for a uterine prolapse. A supra-vaginal amputation of the cervix followed by accurate suture cures the condition and successful pregnancy has followed this operation. When met with in a virgin the same treatment is employed.

TREATMENT OF BACKWARD DISPLACEMENT WHEN PAIN AND TENDERNESS EXIST.

When the body of the uterus is tender and any movement of it is resented, before attempts at replacement are made, treatment should be applied. The best is the "Ichthyol treatment."

For its successful application, the patient should rest in bed for a fortnight or three weeks during which time tampons of glycerine and ichthyol 10 per cent. are inserted into the vagina every other day and a saline douche given once a week to clear away the excess of ichthyol. Ichthyol vaseline 10 per cent. is rubbed into the flanks, and ichthyol pills 2-3 grs. given three times daily. It will be found that after this treatment the uterus can be easily replaced and a pessary inserted.

When the uterus is enlarged and there is excessive and irregular menstruation, probably indicating that there is some adenomatous growth in utero, the curette should be employed to remove this growth under anæsthesia, and after all discharge has subsided a pessary may be inserted.

It is here that the operation of curetting may be usefully employed, but only if the menstrual loss is markedly increased, as it is an operation whose indications are very definitely limited, and it is far too frequently done at the present time.

From a series of cases collected by the late Dr. Herman, he estimated that in 40 per cent. menstruation was increased, sometimes in quantity, sometimes in frequency, sometimes in both. Occasionally it is diminished. What is frequently noted is a "relative retention" of the menstrual flow so that it is prolonged as a brownish discharge for two or three days, and in the intervals between menstruation a uterine discharge mucoid or mucopurulent comes away in gushes.

All these symptoms disappear when the uterus is kept in position and no curetting is required. They prove, however, the evil effects which result from a backward displacement.

The wearing of a pessary is only a part of the treatment of women with backward displacements, and general treatment should always be adopted. For this purpose tonics, exercise in the fresh air, graduated exercises, massage and dieting are most helpful. The appropriate exercises should be written down and carried out by the masseuse under medical supervision.

The somewhat narrow outlook possessed by many of those who attempt to treat these disorders in women has been the means of diverting countless numbers of patients into the hands of various types of unqualified practitioners. Many patients seem to take a delight in informing medical practitioners that they have tried many doctors, without obtaining any benefit, and that they have been cured by massage and exercises. It behoves us all to take the hint and "set our house in order," and remember that to strengthen the abdominal muscles and to favour the deposition of fat is the best way of increasing the retentive power of the abdomen.

THE TREATMENT OF FIXED BACKWARD DISPLACEMENTS IN NULLIPARÆ.

The fixation of the uterus is produced in the great majority of instances by adhesion of the appendages, although the uterus itself may also be bound down. It follows, therefore, that the position of the uterus is secondary to some infective inflammatory process spreading from the uterus and appendages to the pelvic peritoneum or spreading from the bowel.

The primary purpose of treatment must therefore be to deal with the effects produced by the pelvic inflammation.

Where there is a history of previous attacks of pelvic peritonitis with pain and fever, and on examination, a fixed mass, or fixed masses, found behind the uterus, it is suggestive of the presence of pus, and operation is imperative.

In the more chronic or sub-acute infections, pus may not be present, or if it is, the amount is small, and for these palliative treatment by tampons, douches, counter-irritation, etc., is usually recommended.

Here, again, I believe the interest of the patients is best served by an early resort to surgical treatment conducted on conservative lines. Delay means destruction of the value of the Fallopian tube as a channel for the passage of ova or spermatozoa and insidious and destructive changes in the ovaries. To speak of cure by medical treatment is only to fog the vision, for the so-called cure means too often the destruction of the fertility of the individual, the destruction of the function of the tubes and ovaries. Moreover, if surgical treatment be too long delayed a secondary infection from the bowel is not uncommon, which may be so severe as to necessitate for its eradication the removal of the greater part of the genital organs. The policy of "wait and see" should be abandoned, and that of "look and see" adopted.

(*To be concluded in our next.*)

THE DIFFERENTIAL DIAGNOSIS OF MILD THYROID TOXÆMIA AND INCIPIENT PULMONARY TUBERCULOSIS.*

BY C. G. JENNINGS, M.D.
Detroit.

Certain cases of mild thyroid toxæmia with cough and chronic pyrexia bear so close a resemblance to incipient pulmonary tuberculosis that a differential diagnosis may require a very close analysis of all the clinical and laboratory findings. Writers generally have not given attention to this subject. In the presence of the physical signs of an active lesion in the lungs, with or without tubercle bacilli in the sputum, the question of diagnosis between tuberculosis and mild thyrotoxicosis would not arise. Nor would it arise, on the other hand, in a case with well-defined thyroid hypertrophy, tremor, tachycardia and nervous irritability without physical findings in the lungs.

An early, small, central focus of infection may fail to yield signs that to the average physician are sufficient to justify a positive diagnosis of tuberculosis. The X-ray may help, but will not differentiate between an old and an active process, and a positive tuberculin reaction is not always convincing. A negative sputum finding is frequent. Such cases, with the results of physical examination uncertain, and showing constitutional symptoms suggestive of both early tuberculosis and thyroid disease, may give great difficulty in diagnosis. To differentiate the two conditions will demand a thorough familiarity with all the minor clinical distinctions.

It is foreign to the object of this paper to discuss the pathology of these cases of mild thyroidism. It is enough to say that they cannot be classed either as incipient myxœdema or incipient Graves's disease. They appear to be cases of perverted thyroid function, the exact nature of which has not yet been determined. From strictly clinical studies I have thought that this disturbance is primarily a fatigue sub-activity of the gland, followed by a compensating hyperactivity with the elaboration of a toxic secretion. The recently published "Pathological and Clinical Studies," by Wilson and Plummer, show that such a toxic goitre, distinct from exophthalmic goitre, is a pathological and clinical entity. Further, the symptoms of this disturbed function respond to treatment by mental and physical rest, and by the administration of a suitable thyroid preparation.

Mild cases of thyro-toxicosis are seen chiefly in women at two periods of life; in early adolescence and between the ages of 40 and 50. Several cases have come under my observation in young men of neurotic type who have been subjected to prolonged mental over-fatigue, or who have been reduced by acute infections or surgical operations.

For discussion of the differential diagnosis the symptoms of the two conditions naturally fall into three groups.

(1) The symptoms distinctive of thyroid toxæmia: (*a*) Enlargement of the thyroid gland, (*b*) tremor, (*c*) vaso-motor phenomena, (*d*) insomnia, (*e*) nervous irritability.

Inspection and palpation of the thyroid gland is a part of the routine of every complete physical examination. Enlargement of the gland would immediately suggest further inquiry for thyroid symptoms. This may, however, early in the disease, be slight or absent, and the examiner thus led astray. Tremor may not be marked and, unless sought for, is apt to escape detection; when noted it gives a clue to the nature of the trouble. It is not present in tuberculosis, and it is one of the most important symptoms differentiating the two diseases. Vaso-motor ataxia causing patchy blushing of the face and neck is a suggestive symptom, and not present in tuberculosis. Insomnia and nervous irritability are not often seen in early tuberculosis, but are frequent and distressing symptoms of thyroid disturbance. Not rarely they are the symptoms for which the patient first seeks relief.

(2) The symptoms and signs distinctive of pulmonary tuberculosis: (*a*) Tubercle bacilli in the sputum, (*b*) physical signs of an active pulmonary lesion, (*c*) the X-ray findings, (*d*) the tuberculin reaction, (*e*) loss of weight. The first four of this group need no detailed consideration; they are always sought for and, when found, fix the diagnosis. Loss of weight, however, is an important symptom, as it is not often seen in the mild thyroid cases we are discusing: in fact, these patients with their restricted activities often gain in weight.

(3) The symptoms common to both conditions: (*a*) Debility, (*b*) tachycardia, (*c*) pyrexia, (*d*) cough and dyspnœa, (*e*) derangement of digestion and metabolism.

Debility, or the more expressive term fatigability, is an almost constant symptom in both conditions under discussion, and is the one that often first attracts attention to the illness.

Thyroid fatigability is apt to be more pronounced than the loss of strength of tuberculosis, and is more distinctly a nervous symptom. It is easily excited by mental exertion or by emotion. It often shows itself in an uncertainty in walking or an unsteadiness in rising from a sitting posture. It seems to be the symptom that is back of the apprehension these patients often have on the street or in crowded cars. Another distinction of great significance is, that the loss of strength in thyroid toxæmia is not attended, as noted above, by loss of weight. In two recent cases under my observation, when I have strongly suspected an early tuberculosis, the fact that the patients did not lose weight first put me on the track of thyroid disease.

Acceleration of the pulse to 100 or 110, accompanied or not by a mild pyrexia, is a symptom of the greatest significance in the diagnosis of tuberculosis.

Thyroid toxæmia practically always shows a similar tachycardia. Thyroid tachycardia is, however, erratic. Trifling emotional disturbances excite and increase it. The rate will vary twenty beats or more in a brief period of observation. The wave is small and jerky, and the blood-pressure often elevated. The pulse of tuberculosis is steadily above normal, maintains a uniform rate under observation, and the blood-pressure is usually low. In thyroid disease the rapid heart tends to be turbulent in its action. The patient is conscious of the condition, and is distressed by it. In other words, there is palpitation.

Mild chronic pyrexia is one of the most characteristic symptoms of early pulmonary tuberculosis. Of this symptom Hawes, of Boston, says: "Combined with a loss of weight and strength and other suspicious constitutional symptoms, a slight afternoon fever up to 99.2° or 99.4°F., or a constantly subnormal temperature with rapid pulse, may be considered an almost positive symptom of tuberculosis, whether or not definite signs are found in the lungs." This expresses the general medical opinion of the importance of this symptom.

* From *Transactions of the American Climatological Association*, Vol. XXX.

A pyrexia almost identical in its course is met with in many cases of mild thyroid toxæmia. I have been unable to determine to my satisfaction any well-defined distinctions that can be made in this symptom in the two conditons. The range is about the same and the diurnal variations are very similar. Perhaps, the early morning subnormal temperature so frequent in tuberculosis is not often in evidence in the thyroid pyrexia.

Pathological conditions of the upper respiratory tract are noted with great frequency in thyroid toxæmia. Hypertrophied and infected tonsils are found to be present in about 30 per cent. of the cases and it is not improbable that absorption from chronically infected tonsils is an important ætiological factor in thyroid toxæmia. An associated pharyngeal and laryngeal catarrh usually is present, and chronic cough is a frequent result. There is very little to distinguish this cough from that of incipient tuberculosis. It may, however, be paroxysmal in character, or plainly due to excessive pharyngeal secretion.

Disturbances of digestion and assimilation require but a word. They are frequently observed in both conditions. The relation of a persistent indigestion to an incipient tuberculosis is well recognised, and when accompanied by debility, rapid pulse, and fever, always arouses suspicion of infection. There is nothing distinctive, however, in the character of either a tuberculous or a thyroid dyspepsia.

FOLK CURES BY CONSTRICTION AND RINGS, WITH A DIGRESSION INTO THE NATURE OF THE SOUL.*

By DAN McKENZIE, M.D.

ONE of the fascinations in the study of folk-medicine consists in ferreting out the primitive medical practices which passed into orthodox medicine to linger on, some of them, even as late almost as our own days.

Some of these practices are discernible in the constriction cures so common in primitive and ancient medicine, an example of which is still prevalent in England in the popular practice of tying a tight garter round the leg to prevent cramp. In addition to constriction cures proper, we may also take this opportunity of referring to band and ring cures, like the anti-rheumatic finger-ring, which is still obtainable for one shilling at any chemist's.

At first sight, cures like these seem as if they had originated simply in charms, and there can be no doubt that some of them did actually begin in this way. But a closer acquaintance shows us that many of them have a much more complex and interesting origin than that. Of course, as in other departments of folk-medicine, the idea of the charm or amulet is met with even in this group also, but it is not, as I hope to be able to show, the sole origin of the custom.

To begin with the ligature remedy for pain, as in the garter cure for cramp. Here, it is obvious, we are dealing with what, in the first instance, is a simple and rational practice, seeing that pressure and constriction do actually relieve pain. And instances of ligature cures of this kind are plentifully to hand from all countries, savage and civilised. For example, in Sumatra, as Bartels points out, as well as in Western Europe, a band or cloth twisted round the head is a common cure for headache.

In addition to this simple and rational type, however, there are others of which the meaning is not so readily apparent.

First of all, still keeping to the purely physical varieties, there is the large group in which a constriction is applied with the definite object of forcibly restraining growth in bulk, and of these the best-known is the obstetric binder or girdle of pregnancy.

The girdle of pregnancy has an extensive distribution both in time and in space.

As is well known, the women of ancient Greece and Rome were in the habit of wearing a body belt or girdle during pregnancy, and the same is true of the women of Phœnicia, for the symbol of Astarte was a girdle. Assumed at the eighth month of gestation, and worn until parturition, it was then laid aside, for which reason one of the attributes of Artemis (*a*) in Greece and of the Roman Diana was "the girdle-loosener" (Solvizona). In later times the custom met with criticism, however, particularly from Soranus of Ephesus (A.D. 100), who recommended that it should be worn only up to the eighth month and then discarded, in order, as he said, that the weight of the child might aid in bringing on labour at the proper time.

The obstetric girdle was in universal vogue in Europe at one time. Mention is made of it in France in the days of Ambroise Paré, and we are still reminded of it in the French word *enceinte*, as well as in the German word *Entbindung*, which shows that the ancient Germans, like the Greeks and Romans, laid the girdle aside at the onset of labour. Naturally enough, the girdle came to bear a mystic or semi-sacred character, or it had that quality added to it. Thus, in mediæval England the girdle of Abbot Robert of Newminster had the power of ensuring that women who wore it would have an easy confinement.

The Ossianic poems allude to a girdle which had similar properties, and there are said to have been in the North of Scotland obstetric girdles inscribed with mysterious figures which were preserved as heirlooms in certain of the old families. I do not know whether the girdle still lingers on in that part of the country, but in the Lowlands of Scotland and in England the practice seems to have died out.

In France, however, we hear of mystic girdles as being in use as recently as 1886. The sisters of St. Ursula, of Quintin, Côtes du Nord,

"own one of the chief educational seminaries in Brittany. And when a young lady whom they have educated gets married and is about to become a mother the pious sisters send her a riband made of white silk, decorated by the clever brush of the best caligraphist in the community with a beautiful inscription in blue letters. Before sending it off the sisters bring it carefully into contact with the reliquary in the parish church, in which is preserved a precious fragment of the very binder which the Holy Virgin herself wore, as a number of unimpeachable parchments clearly certify. The inscription in blue letters on the riband reads:—'*Notre Dame de Délivrance, protégez-nous!*' The young lady who receives the blessed riband is instructed to put it around her body in order that her accouchement may terminate happily."

Turning now to extra-European countries, we find the girdle in common use there also. That of Japan deserves a special mention. The first we hear of it is, strange to say, in an account of a Japanese Embassy to Rome (probably a fruit of the early Jesuit mission to that country by St. Francis Xavier) as far back as A.D. 1586, by a certain Guido Guetteri, a Venetian.

"As long as they are not pregnant," he writes, "the binder worn by Japanese women is large and easy, but as soon as they perceive that they are gravid they tighten up this bandage so forcibly with a string that one would almost expect them to burst. 'And

* Read at the History of Medicine Section of the Royal Society of Medicine.

(*a*) The Athenian women at their first confinement dedicated the girdle they had worn to Artemis, placing it in her temple.

yet,' they say, 'we know by experience that if we do not do so we have to endure a very severe labour.'"

The Japanese binder was strongly condemned by the reformer Kangawa, from whom we learn that it can be traced back in the historical records to about A.D. 1180. As a result of Kangawa's sensible opposition, the obstetric binder in Japan has now fallen into comparative desuetude.

The girdle is worn in China. And in Burma, as in ancient Rome, a tight bandage is applied at the beginning of the eighth month in order to prevent the womb rising, since the Burmese woman believes that the higher the child rises, the longer and more difficult will be the labour. Similar practices are reported as being prevalent among the women of Macassar, Celebes, Java, and Malacca, and also among the squaws of the Chippeway Indians.

Thus the origin of the girdle of pregnancy seems to lie, as we see from the more primitive instances, in the hope of preventing, by sheer physical force, the fœtus from reaching a size so great as to impede labour. Magical restraint does not seem to be thought of in any of the instances I have so far encountered, but that a religious, as distinct from a magical, modification of the custom comes into play is no more than one would expect. Popular customs such as this was always do take on a religious cast after a time.

Every modern medical practitioner is of course acquainted with the "binder" which is applied after the child is born, in which respect it differs from the ancient girdle of pregnancy. In spite of this difference, however, it is not unreasonable to suppose that the puerperal binder of modern obstetrics may be the lineal descendant of the girdle of pregnancy.

Apart from the girdle of pregnancy, cures do occur in which there is a magical extension of the notion that a constriction is physically capable of restraining increase in bulk. Tumours, and especially goître, are treated in this fashion.

In Derbyshire, Lanarkshire, and elsewhere in Britain, as well as in Switzerland and Germany, a favourite method of restricting the growth of the enlarging thyroid of goître is to bind a silk thread, preferably red in colour, three times round the neck. In Essex for an "enlarged neck" they used to fasten a snake skin, sewn in a piece of black silk, round the neck for the same reason. The belief is akin to that recorded by Pliny that "if young twigs are made into a collar and put round a cock's neck it will never grow."

Psychologically such cures belong to the same order of magic as the "measuring" cures, and as that which believes that if you pass your leg over a child's head you will stop it growing.

(There is another form of homœopathic magic which may possibly have participated in the evolution of band and ring cures, and that is the well-known magical use of knots. But as I have been unable to find any instance in which the connection is clearly manifested, I do not propose to spend any time in discussing it.)

We turn now to a variety of the constriction cure, which although similar in appearance to those we have just been describing, is quite different from them in its origin and nature. I refer to the constriction of the extremities in the treatment of hæmorrhage, the vogue of which is widespread.

In Scotland bleeding from the nose is, to this day, quite frequently treated among the people by tying a thread or a string tightly round the thumb.

In the province of Bari, in Northern Italy, menorrhagia is treated by binding a rope round the waist, the wrist, and the ankle of the patient, and, if that fails, then threads of black wool are tied round each of the fingers and toes.

In Bavaria the same disorder is treated by encircling the little fingers of both hands with red silk thread, and as many times as the thread is wound round the finger by so many days is the duration of the discharge reduced.

As far as my reading goes no explanation of this method of treatment has hitherto been offered, and the custom has obviously nothing whatever in common with the modern rational practice of uniformly bandaging the limbs in the treatment of the effects of severe hæmorrhage. At first sight, indeed, the constriction treatment of bleeding would seem to be simply nonsensical or fanciful. But such a conclusion would be merely a confession of ignorance. There is always some sort of reason for every folk-cure.

My suggestion is that the constriction was applied in order to fetter the soul so that it could not escape from the body, and my reasons for this explanation, at first sight so far-fetched, will appear in the course of the following remarks.

Primitive Ideas on the Nature of the Soul.

Nowhere, perhaps, in the whole range of folk-lore are the primitive ideas so fanciful and so pleasing as in that section of early psychology which has to do with the soul, and no ideas have proved to be so capable of expansion and development as these were; an expansion and development which, of course, they underwent during the long course of their evolution under the care of the constructive philosophers.

In their crudest forms probably no very clear distinction exists between the idea of the soul and that of the life of a living being; at all events, we certainly must confess that it is difficult, if not impossible, for us to disentangle the ravelled ideas of early man on this subject. But, in its later developments, we may say that, speaking generally, ancient and uncivilised people seem to mean by the "soul" what we in these days would term the consciousness, or the Ego. While, however, it is true that in many languages the word for a "soul" seems originally to have sprung from the idea of a breath (*spirit, ghost, animus* related to ἄνεμος, etc.), nevertheless the soul was no mere abstraction. It was, on the contrary, an actual physical entity, a material object, which, although perhaps so faint and shadowy as to be invisible to ordinary men, was yet quite plainly manifest to those with clearer vision, of whom, in the olden times, there were many.

Sometimes the soul takes the form of a copy in miniature of its owner—what the ancient Egyptians called the *Ka*. In many mediæval prints, for example, depicting the death of certain people, there may be seen a small figure emerging from the mouth. This little mannikin, who is, so to speak, the *genius loci* of the human body, resembling the tree-spirit or the river-spirit of polytheism, resides within the body; in the head generally, sometimes in the chest. He never seems to be found below the diaphragm, where, to be sure, in women at all events, he would probably have found his claim to supremacy contested by another creature, the uterus namely. Upon his behaviour the health of the owner depends to a large extent. In some parts of the world it is said that, if he falls down, epilepsy will result; if he is enticed away, and a dog's soul takes his place, the host will suffer from hydrophobia, and so on.

But there is another and probably more widely distributed notion than this of the soul as a mannikin, or *Ka*, a notion which is due to the observation that, like the uterus, the soul has a tendency

to wander away from the body, slipping out by the mouth or nose. Fortunately, such absence does not necessarily cause death, unless, that is to say, it stops away too long. No doubt when death takes place the soul does forsake its tenement, and for this reason some savages strive to keep their dying friends alive by stopping up the mouth and nose. But in the ordinary way, when the soul goes a-wandering, all that happens is that the owner falls asleep. Sleep, in other words, is the temporary absence of the soul, and dreams are the adventures it encounters while out of the body. At the same time its absence, albeit only temporary, is not wholly free from danger, as some accident may intervene to prevent its return. If the position of the sleeping body be changed, for example, or if some mischievous person disguise the sleeper, as when a moustache is painted on a slumbering lady's face—a shameful trick, equivalent to murder in the eyes of the people of Bombay—then the home-seeking soul gets bewildered, and, like bees whose hive has been shifted, it is unable to find its way back into the body again, so that the sleeper dies without waking. For this reason, also, it is a dangerous thing to rouse a person suddenly from sleep, before, that is to say, the soul has had time to flit back again.

By a natural extension of this belief illness, and especially illness characterised by a loss of consciousness, such as syncope, epilepsy, coma, and the like, is frequently attributed to the withdrawal of the soul from the body.

These ideas are early man's reply to the still unanswered questions: What is sleep? What is unconsciousness? What is death? And the answer, although it may strike us as naïve, is by no means absurd or irrational. It is only another way of saying that there is a Something which comes mysteriously and as mysteriously departs; when it is present, the man is alive—he can see, hear, speak, move, and behave as a sensible being; when it is gone on a short journey, he is half-dead,—the body is warm and the breath comes and goes, but only in an automatic fashion; when it goes for good, all vital processes cease and the person dies.

By a simple process of what we call imagination or metaphor, but what the uncultured man regards as actual fact, this mysterious flitting entity takes the form of a winged creature—a bird, a bee, a moth, or a butterfly.

We have already seen that the Egyptian *Ka* represents the soul-mannikin of early culture, but the Egyptians also found room in their theology for the winged soul, which they distinguished from the *Ka* and figured in the hieroglyphs as a man-headed hawk—the *Ba*. (The popular notion that the Egyptian *Ka* is the equivalent of the "soul" of modern European thought is an error. The Egyptians, as a matter of fact, divided man into no fewer than nine parts, including the physical body—*Khat*—a minuteness of analysis which has no parallel in any philosophy since theirs. It is true that attempts have been made to show that this nine-fold Egyptian structure is the same as the tripartite division of Græco-Roman and modern European philosophy into body, spirit or life, and soul or consciousness, but they are not convincing.)

In ancient Greece the soul was a pigeon or a butterfly. Pigeons, it was said, first made their appearance in that country at the time of the wreck of the Persian fleet off Mount Athos, and in other parts of the world also there are those who see white birds emerging from the waves when ships go down. The dove is, indeed, perhaps, the most widely-distributed form of the soul. Its significance and importance in the Christian religion is evident from the facts that it was often carved upon tombstones, and that the Holy Spirit took the form of a dove. And the curious association of the dove with illness, and especially with death, is exemplified in the following excerpts from the folk-lore of the subject.

Grimm notes that over the graves of the Lombards poles were set up with pigeons on them. (Just as the man-headed hawk is figured upon the ancient tombs of Egypt.)

Presumably, also, such beliefs are responsible for the practice of applying pigeons to the feet of the dying, as Pepys informs us was done when the queen of Charles II. was sick unto death.

In Scotland, "pigeons were left fluttering in their dying agony against the dying man's feet." "Early in the morning a near relative would remove the pigeons and carry them to a place where the dead and the living did not cross, that is, to the top of a precipice," and there leave them. (Black.)

In many parts of England there is an old superstition that dying people cannot take leave of life on a bed of pigeons' feathers, and for a patient to ask for pigeons to eat is looked upon as a very bad sign. On the other hand, there is a popular belief in some mysterious nutritive value in pigeons and pigeon-broth for sick people. Again, Fernie records the belief that "it is considered a sign of approaching sickness if a pigeon comes and accidentally perches on a table; and, if on bed or a chimney-piece, of death, especially if the pigeon be a white one."

English medicine in the seventeeth century considered pigeons valuable in palsy and for aged and phlegmatic men—supplying them with life, as it were.

There is a superstition in many parts of England, particularly in the West Country, that dissolution cannot take place unless the window is opened to allow free egress to the soul. A prolongation of the death agony is due, it is supposed, to the vain efforts of the soul to escape, and in order to put an end to the suffering, the window must be opened, when the struggling soul will emerge and the sufferer be at rest. That the death-agony can be shortened by so doing is a fact, as I can testify, the reason probably being, as Sir Lauder Brunton pointed out many years ago, that the lowering of the temperature in the room when the window is opened administers the *coup de grâce* to the patient. It is said, also, that the attention of the watchers is drawn to the window by a dove tapping at it, the dove being the means of carrying the soul into space.

(In the estimation of the meaning of folk-cures and practices regard should be had only to their general trend. When we descend to particulars we lose ourselves in a maze of inconsistencies and contradictions. Thus in the above, the pigeon is seen to be at one time a danger, at other times a safety. But the general tendency is clear enough, and shows that the pigeon was connected with death, or, in other words, with the flight of the soul.)

In this connection the marvellous image, or vision, of Plato, that greatest of mystics, comes to our recollection, where he figures the soul as a bird-like creature, which in its sojourn in the flesh, and from its contact with sin and the world, tends to lose its sustaining plumage and to become a mere denizen of lower space—being "earth-bound," to use the modern theosophical phrase—but which also, by the love of wisdom and the exercise of well-doing, may acquire new wings wherewith it may soar into the lofty and ethereal realms of truth with the sureness and power of the eternal gods themselves. For every sin committed, so to speak, a feather is lost, and with it a modicum of

buoyancy; while, on the other hand, with every good and noble thought or deed, a new feather is obtained and fresh buoyancy acquired. Here, also, we may recall, as fundamentally akin to the Platonic idea, the Egyptian doctrine of the weighing of the dead man's heart against a feather by Thoth in the presence of the gods. And so we see how philosophical and religious beliefs and aspirations of the most sublime character may occasionally spring from what we have been long accustomed to regard as nothing but the vain and empty superstitions of vulgar and ignorant people.

Another beautiful idea is that of the Greeks who saw in the butterfly (ψυχή) emerging from its chrysalis the soul (also ψυχή) issuing from the body at death, a belief which, although employed metaphorically or as a type by the Platonic philosophers, was in the popular mind of the time an actual and genuine occurrence.

(We may observe, in passing, that both Germans and Romans differentiated the soul from the mind: ψυχή *animus*, the soul, and νοῦς *mens*, the mind; while *anima*, life, is akin to ἄνεμος, wind or breath. *Animus* and *anima* are "next door to each other," as Grimm says.)

Among the uncivilised races of the present day the idea of the soul as a winged creature is very common indeed, and Frazer gives a long list of examples.

The bee, also, is met with in some old Scots tales creeping out of a sleeper's mouth and flying away into the dream-world.

The next step we take in our inquiry brings us within sight of our goal, for it has to do with the curious association of the soul with the blood. Obviously the connection is due to the fact that bleeding tends to end in the flight of the soul, or in syncope and death. The soul, as Grimm says, "has her seat in the blood, and as that ebbs away, she escapes with it," and from this natural observation there spring, he suggests, the pretty myths of flowers or trees growing out of the body after death. Drops of blood turn into yellow flowers, as from the blood of Ajax a herb sprouted. Further, one of the old German sagas speaks of the soul flowing away out of the body, while, in the Iliad, the soul escapes through a gaping wound, as if it were an extra mouth, so to speak. Then there is the ancient Hebrew doctrine that "the blood is the life," and Sallust's remark (for which I am indebted to Fernie), "*Sedem animæ in extremis digitis habent.*"

Here we tread very close upon the heels of the old medical belief that the arteries contained the soul, but caution forbids me claiming this as an offshoot from the more ancient idea, in view of the explanation usually given that this belief arose from the observation that after death the arteries are found to be empty.

We have been dealing principally with the departure of the soul, but there also arises the equally interesting question as to the time of the arrival of the soul in the body, a question which during the Middle Ages was, for religious reasons, a warmly debated topic of discussion.

According to most folk-beliefs it would seem to enter the body at birth, but the advent of the soul is also in many places, dated to the time of the quickening of the fœtus *in utero*.

The soul, then, being bird-like in nature, and liable to embarrassing and perilous absences, it becomes important to devise a means to prevent its escape. For this purpose what could be better than a snare or a tie of some kind?

On the return of a Burmese or Shan family from a funeral, a tendency has been noticed for souls to take flight. In order to prevent such a calamitous ending to an already sorrowful occasion, the old men are careful to tie strings round the wrists of each member of the bereaved family.

Bartels figures a soul-snare which the Harvey Islanders employ when they wish to compass the destruction of an enemy. It consists of a series of rings or loops made of rope, which is hung upon a tree in the neighbourhood of the intended victim. When that unfortunate man catches sight of this magical gin, knowing only too well what it means, he returns to his dwelling, lies down, and very soon gives up the ghost in real earnest.

This kind of knowledge gives to us a new understanding of the Psalmist when he says: "Our soul is escaped as a bird out of the snare of the fowler; the snare is broken and we are escaped."

We have already cited instances of ligature cures. Here is another in which, it is interesting to note, the fear of bleeding is not present. "The Minangkabauers, of Sumatra, fasten a skein of thread or a string round the wrist or loins of a woman in childbed, so that when her soul seeks to depart in her hour of travail it may find the egress barred." (Frazer.) And finally, here is the same cure, in which the fear of hæmorrhage is said to be the reason for the ligature: in Franconia, and also in other districts of Germany, a rather common practice is the binding of the arms and legs at the elbows and knees during labour in order to hinder bleeding. One often hears a trifling *post-partum* hæmorrhage credited with being the cause of diseases which appear later on. (Ploss and Bartels.)

It is interesting to note, in conclusion, that the ligature cure was practised by ancient and mediæval doctors of good standing. Paulus Aegineta, for example, treated Deliquium animi (which Adams translates by "the absence or want of the soul"—evidently what we nowadays term "syncope" or "fainting") by ligatures round the arms or legs, and the same method was recommended by him for epistaxis and hæmoptysis, while he gives it the first place in the treatment of menorrhagia.

Finger-Ring Cures.

The popular custom of wearing rings for rheumatism is also very ancient. I am inclined to look upon this particular cure, however, as different in its origin from the soul-strictures we have just been discussing. Probably it sprung from the wearing of charms. For in the early times jewellery in general, and finger-rings in particular, though often doubtless worn simply for adornment, were also frequently made the vehicle of charms, as King has pointed out. Naturally, a band or ligature would be held to be all the more efficacious if the material of which it was composed was made of some magical substance like red silk; if the bandage was decorated with religious symbols; if the ring was composed of some rare or curious metal; or if it bore in a setting a scarab or blood-stone, or some such potent jewel.

An example of this kind of polypharmacy is afforded by the following from the *Compleat Housewife* (18th century):—

"*To make necklaces for children cutting teeth.*—Take roots of henbane, or orpin and vervain, scrape them with a sharp knife, cut them in long beads and string them green; first henbane, then orpin, then vervain, and so do till 'tis the bigness of the child's neck. Then take as much red wine as you think the necklace will suck up and put into it a dram of red coral, as much peony-root finely powdered. Soak your beads in this twenty-eight hours, and rub the powder on the beads."

Many of the herbal remedies, like henbane, orpin, and vervain, owed their reputation to qualities magical and mystical, and not in the first instance, at all events, to any actual pharmacological effect or true therapeutic power. In many cases, as I have shown elsewhere, the real efficacy of the remedy remained undiscovered until patients began the

habit of swallowing the herb in order to bring it more closely into union with the body and personality.

In conclusion, we may for convenience summarise the reasons which led to the use of strings and rings in medicine as follows:—

(1) Circular pressure, applied for the relief of pain.

(2) The same, applied with the object of physically restraining the continuing growth of a swelling or tumour.

(3) The magical extension of the last-named. (Related also to "measuring" cures).

(4) Bands and ligatures put on to prevent the escape of the soul.

(5) Religious or magical bands or rings worn as charms or amulets.

It is possible that the mysterious rite of circumcision may, in the first instance, have orginated in an effort to avoid the real or magical effect of an anatomical constriction inhibiting a natural function, but to discuss this topic would lead me far from the subject-matter of the present communication; consequently I prefer to postpone its consideration for the time being.

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CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

CONSCIENTIOUS OBJECTORS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—We hear much just now of the views of "conscientious" objectors—men who say they object not merely to combatant service, but to any service which would assist our militant forces.

The ordinary man of common sense refuses to believe in any religious view which condemns a man for resisting injuries. The "pacifists" apparently often hold, not only that non-resistance to personal injury is the part of a true Christian, but that even to help by violence another person who is being oppressed is contrary to the true principles of Christianity. This is a difficult thing to maintain, and most men rightly reject such views without troubling to examine them. It is easy to set them down as the excuses of cowards, but this cannot always be the case. A real coward is very rare, and merits our pity as much as our contempt, but there really do seem some men of average courage who think that it is wrong to fight, even for a just and righteous cause.

They are the victims of false teaching and bad religion. They justify themselves, no doubt, by the "non-resistance" sayings of our Lord. But to tear these sayings out of the context of a life which resisted evil to the uttermost is to render that life meaningless. Our Lord's fierce denunciation of those who misled others, and imposed burdens on others rather than helped to carry them, no less than His violent personal attack on the desecrators of the Temple, is very unlike the attitude of some of our modern religious Pacifists. And how many of those who readily recall the celebrated "Resist not evil" passage also remember Christ's final charge to His disciples, given in view of the whole of their future career: "Now . . . he that hath no sword, let him sell his garment and buy one"?

Any argument may be founded on scraps of texts, but in truth that view of religion which regards it as always first concerned with the preservation of peace is fatally defective; no less so is the opposite view that "The Lord is a man of war." Either view taken alone is corrupting.

Britain before the war was growing ignorant of the very meaning of patriotism, blind to duty, full of half-understood Socialism, and of vague and idle discontent. The fruit of the second view taken alone is—Germany as she was and is. The evils come from taking either view alone. They must be held in union. Both are necessary; both required by true religion. Good pacificism and good militarism are indissoluble allies for a common end, which is the formation of nations, of men, of the human soul.

Religion alternates between the preaching of peace and that of war. Try to expurgate the Bible in the interests of either and see what you get. A Pacifist psalter would misrepresent the spirit of the Hebrew religion; so would a collection of the war-like psalms.

"I will lay me down in peace, for thou Lord only makest me dwell in safety." Yes, but then, "Blessed be the Lord my rock, Who teacheth my hands to war and my fingers to fight."

These sayings explain each other. The moral value of the object for which you fight makes the difference between a religious and an evil fighter. Moments may come when a man must say to his soul, "Now must I fight to the uttermost or I shall have no more peace." More rarely such supreme moments come to a whole race. Such a moment is upon us now. There is no longer any room for doubting that in fighting Germany we are fighting *naked evil*. By her declared policy previous to the war, by her methods in waging it, she has removed all room for any doubt. She is the enemy of every free man, the enemy of all Christian civilisations. And against pure evil man must ever be a fighter. If not he will be destroyed, having betrayed his trust as a human being. If the real nature of war was better understood, and the issues involved in this war more clearly seen, I think there would be fewer "conscientious" objectors.

I am, Sir, yours truly,

J. LAWRENCE GREEN, M.A.CANTAB.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I have some difficulty in understanding Mr. Gwillim Davies' position, for on the one hand he says he has no sympathy with the actions of these people, but on the other he quotes a Bishop, a popular dictionary, some poets, and a missionary in their favour. More than this, he tries to help them by the old device of damning the plaintiff's attorney, for he accuses the Law of not doing what it has undertaken to do, and of "naked Prussianism." The difficulty of the Tribunals has been

to find the "honest objector," and if Dr. Davies, in the *role* of a modern Diogenes, has found any, he is more successful than I have been, for a greater farrago of nonsense than that served up by most of the conscientious objectors in the Courts I have never read. But if the Law ever did "safeguard the *honest* objector"—not, mind you, the same thing as the *conscientious* objector—it has seen fit to change its mind by ordering general compulsion, through which it is to be hoped these subtle abstentionists will be brought to their proper sphere of duty. Dr. Davies has not been particularly happy in his choice of authorities, for when he says that "words mean what they pass current for" he is distinctly in error, for in truth words often mean what they do not pass current for, they are a false coinage; and in quoting Mr. Arnold Bennett to the effect that the Germans will ultimately realise their national guilt, he just proves that the knowledge will have to be put into them, not that it was an innate sense; their new conscience will have cost much blood and treasure, all of which might have been avoided if they had had an innate sense of right and wrong.

If Dr. Davies has studied modern psychology—which, however, is not apparent from the class of writings he quotes with approval—he must know that it is not any *ipse dixit* which makes the knowledge of right and wrong rest upon education and experience: it is the laborious and experimental teaching of mental philosophy, which, though still imperfect, is yet progressive, and has already proved that many of the mental processes, such as attention and memory, among others, are to be understood in terms of logarithms and algebra. I believe in the Christian religion, though much of the New Testament I cannot, after diligent reading, understand, but I cannot anywhere find authority for innate knowledge of right and wrong, a doctrine which, as I think, would sap our striving to do what is right, and would leave us merely passive recipients of things as they happen to us, and would leave us an easy prey to those who have made up their minds to plunder and aggression. The very futility of these imaginary "faculty processes," their powerlessness to effect what they are supposed to do, is enough to make one doubt *primâ facie* their existence, but the theory is so ready to hand for those who are of strong emotional tendencies and are propagandists of selfish objects, that the real nature of mental processes is neglected, and old terms are raked up which were used in the dark past to conceal ignorance. The action of Parliament last night makes it unnecessary to prolong discussion on this subject. The conscientious objectors will be summarily absorbed, we shall be saved from the public enumeration of their banalities, and it is quite likely that their new experiences will prove to be the creator of a new consciousness so different from the old self that they will be ashamed to own that they ever held it.

I am, Sir, yours truly,
T. Claye Shaw.

Weymouth Street, London.
May 5th, 1916.

To the Editor of The Medical Press and Circular.

Sir,—Dr. L. Gwillim Davies and Dr. Claye Shaw are foemen worthy of each other's steel, and it is to be hoped that they will fight their polemic to a finish, for the edification and instruction of your readers. It would be impertinent for me to intervene in such a combat, except to say merely that I am on the side of Dr. Claye Shaw, and that it is to me unthinkable that any intuition can exist beside the instincts of the animal except such as are developed by the influence of environment, of course, in the widest sense of that word, especially religion, education, and parental example.

My main object in writing is, however, to present the controversialists with the following string of quotations from a store which they may, if they please, profitably, perhaps, explore for themselves:—

"Conscience does make cowards of us all."—Shakespeare.

"O the cowardice of a guilty conscience."—Sir Philip Sidney.

"A good conscience likes to speak out."—Pausanias.

"The guilty conscience fears when there's no fear."—Rowland Watkyns.

"My conscience hath a thousand several tongues." Shakespeare.

"Conscience is a god to all mortals."—Menander.

"Conscience is but a word that cowards use."—Shakespeare.

"Conscience is the chamber of justice."—Origen.

"Conscience is the sentinel of virtue."—Johnson.

"Conscience is the voice of the soul."—Rousseau.

"Conscience is wiser than science."—Lavater.

"He is but naked . . . whose conscience with injustice is corrupted."—Shakespeare.

"Les lois de la conscience que nous disons naistre de nature, naissent de la coustume."—Montaigne.

I am, Sir, yours truly,
A Student of Psychology.

May 5th, 1916.

THE REFORM OF VOLUNTARY AID DETACHMENTS.

To the Editor of The Medical Press and Circular.

Sir,—The first step towards the reform of evil is its proclamation with a view to its general recognition.

The constitution of Voluntary Aid Detachments must surely be revised, for it has now been tried as by fire and found wanting. Because these bodies have done good work, it does not follow that they need no reform. They are being used as it was never intended that they should be used when they were instituted, and though Sir Alfred Keogh wrote that "their essential function is improvisation," they are none the better for being themselves improvised, and the best of them were established "subject to alteration to suit military requirements." Your leader writer may take it that the time for their alteration has fully come.

I am, Sir, yours truly,
Tekel.

May 6th, 1916.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Obstetrics.

Meeting held Friday, March 24th, 1916,

The President, Gibbon FitzGibbon, M.D., F.R.C.P.I., in the Chair.

Myomata from a case of Cæsarean Myomectomy.

Dr. Gibson showed a specimen of above. The patient was first seen nearly four years ago, when she was thirty-two years of age, and had been married for nearly a year. She was in good health, and not in any way inconvenienced by the condition of her uterus. She menstruated regularly. She did

not wish to undergo an operation if she could become pregnant without doing so. The largest tumour, which was then about the size of an apple, was situated apparently in the layers of the left broad ligament and attached to the supra-vaginal portion of the cervix. It was pointed out to her that there might be trouble during labour if she did become pregnant, and removal of the tumours was recommended. The operation was declined. She returned within a year for her confinement. The fibroid in the pelvis did not then seem much larger. It was possible to push it well out of the way, and to feel the presenting part of the fœtus, which was the breach. Labour progressed normally, and the tumour was pulled up satisfactorily. When the os was nearly fully dilated it was possible to feel the tumour above the brim, and the breach entering. The mother and child were then in good condition. About half an hour later the fœtal heart could not be heard, and examination showed that the cord had prolapsed past the tumour through a fully dilated cervix. The child was extracted at once, but was dead. The patient promised to return for the removal of the tumours, but did not do so. She returned six weeks ago for her second confinement. The pelvic tumour was now the size of a small melon, and so much in the way that it was not possible to feel the presenting part, which was the head. A Cæsarean section was performed before labour started. The child was extracted alive, and the uterine incision closed. There was no difficulty in removing the tumours, two of which, including the largest, were subserous, the remainder being interstitial. There were five tumours in all. There was no more bleeding than if the uterus was not pregnant, and the extent to which the uterus could be drawn up outside the abdominal incision made the myomectomy easier than it generally is. It was intended to allow the patient to deliver herself if she should become pregnant again, and it was submitted that Cæsarean myomectomy is the proper treatment for labour obstructed by fibroids when the uterine cavity is aseptic.

Sir WILLIAM SMYLY said that one of the most interesting questions in connected with Cæsarean section was whether the uterine scar could be trusted in subsequent labours, and in that respect he considered that this case differed from the general rule inasmuch as not only had the woman already borne a child per *vias naturales*, but the cause of the previous obstruction having been entirely removed, no unusual strain upon the uterine wall was to be expected.

Dr. NEILL said that he remembered a patient who had a Cæsarean section performed for myoma obstructing labour, and who at a subsequent labour, about twelve months afterwards, was delivered by forceps without any difficulty.

The PRESIDENT said he thought a myomectomy after Cæsarean section was better than the usual procedure of hysterectomy. He thought that the patient should be allowed to deliver herself in any consequent confinements. He held the view that when the cervix and vagina had already been dilated by the delivery of a child, and there was no obstruction, the scar in the uterus would hold, but where Cæsarean section was done on a *primipara* the risk of subsequent labours would be too great.

SOME POINTS IN CONNECTION WITH PUERPERAL ECLAMPSIA.

Sir WILLIAM SMYLY read a paper on the above.

Dr. NEILL said that a patient of his who suffered from albuminuria with no convulsions had very severe *post partum* hæmorrhage. On the ninth day she had several severe fits, and was unconscious for four days. For eight days nothing was given but water and lemonade. Bicarbonate of soda solution, 1 dram to a pint of water, was injected under the breasts. She recovered.

Dr. GIBSON said that Sir William Smyly had particularly raised the question of high blood pressure and venesection. High blood pressure was valuable in that it helped to promote excretion of the poisons, but its evil effect was the strain it put on the poisoned heart. Its value, when taken in conjunction with other symptoms, lay in the fact that when a patient with high blood pressure and treatment intended to eliminate the poisons, and prevent any additional poisoning, did not improve, she must be considered as drifting to coma and death, and should have her uterus emptied. He taught students that this matter could be settled within a few days during the so-called pre-eclamptic toxæmia when proper treatment was adopted and repeated examinations were made of the patient's general condition, blood pressure, pulse rate, urine, eye symptoms, etc. He regretted that Sir William Smyly did not touch on the question of prevention. Patients should be made familiar with the early symptoms of the toxæmia of pregnancy. He had three cases of death without convulsions, and cases of death after one or two convulsions. The *post-mortem* examination showed degeneration of the kidneys and liver of such extent that they could not have survived. On the other hand, patients frequently reacted to the poisoning by developing vomiting or convulsions, etc., at an early stage of the toxæmia, and with appropriate treatment they should recover. Unfortunately, however, the majority of hospital patients, not being warned, took no notice of the minor symptoms which would have indicated the danger. As regarded venesection, he had found it of use in controlling the convulsions. Its good effect depended on its early use and the amount of blood removed. He consequently always bled his patients, from twenty to forty ounces, at once. It had stopped the convulsions in many of his cases, and with other treatment had helped towards their recovery. In some cases, although the fits were controlled, he found there was no other improvement in the patient's condition. He believed that very many of the good results got by early operation were due to the bleeding induced.

The PRESIDENT said he thought the present nomenclature satisfactory. All the conditions might be due to toxæmia, which might be the primary disease, while the hæmorrhage, vomiting and fits were only the individual exhibition of the disease. As to the treatment, he thought that bleeding, when carried out as it was fifty or sixty years ago, gave good results, but he would follow the treatment introduced by Dr. Tweedy as probably the best at present.

In reply, Sir WILLIAM SMYLY said that the main point in his paper was to show that there was a definite disease, and that convulsions, coma, hæmorrhages, albuminuria, and high blood presure were only complications of that disease. It was desirable that they should be included under one name, and not treated as separate entities.

SPECIAL REPORTS.

MEDICAL WAR HONOURS.

A Supplement to the *London Gazette* gives a list of awards and promotions for services in connection with the war :—

ORDER OF THE BATH.

The King has been graciously pleased to give orders for the following appointments to the Most Honourable Order of the Bath for distinguished

service in the field. The appointments to date from January 1st, 1916 :—

To be Additional Members of the Military Division of the Third Class, or Companions, of the said Most Honourable Order: Temporary Colonel William Hunter, M.D., F.R.C.P., Army Medical Service; Temporary Colonel Charles Alfred Ballance, M.V.O., M.B., F.R.C.S., Army Medical Service; Temporary Colonel Arthur William Mayo Robson, C.V.O., F.R.C.S., D.Sc., Army Medical Service; Temporary Colonel Vincent Warren Low, M.D., F.R.C.S., Army Medical Service; Temporary Colonel James Purvis Stewart, M.D., F.R.C.P., Army Medical Service; Temporary Colonel Charters James Symonds, M.D., F.R.C.S., Army Medical Service; Temporary Colonel William Thorburn, M.D., F.R.C.S., Army Medical Service; Temporary Colonel Charles Snodgrass Ryan, M.B., Army Medical Service (Colonel, Australian Army Medical Corps); Temporary Colonel Frederic Dougan Bird, M.B., F.R.C.S., Army Medical Service; Temporary Colonel Sir Victor Alexander Hadon Horsley, F.R.S., M.B., F.R.C.S., Army Medical Service.

St. Michael and St. George.

The King has been graciously pleased to give directions for the following promotion in and appointments to the Most Distinguished Order of Saint Michael and Saint George, for distinguished service in the field. To be dated January 1st, 1916 :—

To be an Additional Member of the Second Class, or Knights Commanders, of the said Most Distinguished Order: Surg.-Gen. William Babtie, V.C., C.B., C.M.G., M.B., K.H.S. To be Additional Members of the Third Class, or Companions, of the said Most Distinguished Order: Temporary Col. Alfred Herbert Tubby, M.B., F.R.C.S., Army Medical Service; Temporary Col. Archibald Edward Garrod, M.D., F.R.S., Army Medical Service; Temporary Col. Fleming Mant Sandwith, M.D., F.R.C.P., Army Medical Service; Temporary Col. William Henry Willcox, M.D., F.R.C.P., Army Medical Service; Major (Temporary Lieut.-Col.) Creighton Hutchinson Lindsay, M.D., R.A.M.C., T.F. Canadian Army Medical Corps: Lieut.-Col. Frederick Etherington; Lieut.-Col. Samuel Hansford McKee; Major Evans Greenwood Davis.

D.S.O.

The following have been appointed Companions of the Distinguished Service Order: Lieut.-Col. Ernest Victor Gostling, R.A.M.C., T.F.; Major John Grenvill Bell, M.B., R.A.M.C.

Military Cross.

The Military Cross is awarded to: Temporary Captain Walter Netherwood Rishworth, M.B., R.A.M.C.

Indian Gallantry in the Dardanelles.

It is announced in the *London Gazette* that his Majesty the King-Emperor has conferred the undermentioned reward for gallantry and distinguished service at the Dardanelles, with effect from January 1st, 1916, inclusive :—Second Class Indian Order of Merit: No. 880 1st Class Sub-Assistant Surgeon Ghaus Muhammad, Indian Medical Service.

MEDICAL SERVICE IN GALLIPOLI.

The following names, which through various causes could not be included at the time, are now added to the list of officers mentioned in General Sir Ian Hamilton's despatch of December 11th, 1915, published in a supplement to the *London Gazette* dated January 28th, 1916 :—

Medical Services.

Army Medical Service and R.A.M.C.—Surg.-Gen. W. Babtie, V.C., C.B., C.M.G., M.B., K.H.S., Temp. Col. C. A. Ballance, M.V.O., M.B., F.R.C.S., Temp. Col. F. D. Bird, M.B., F.R.C.S., Temp. Col. A. E. Garrod, M.D., F.R.S., Temp. Col. Sir V. A. H. Horsley, F.R.S, M.B., F.R.C.S., Temp. Col. W. Hunter, M.D., F.R.C.P., Temp. Col. V. W. Low, M.D., F.R.C.S., Temp. Col. A. W. M. Robson, C.V.O., F.R.C.S., D.Sc., Temp. Col. C. S. Ryan, M.B. (Col. Australian A.M.C.,), Temp. Col. J. P. Stewart, M.D., F.R.C.P., Temp. Co. C. J. Symonds, M.D., F.R.C.S., Temp. Col. F. M. Sandwith, M.D., F.R.C.P., Temp. Col. W. Thorburn, M.D., F.R.C.S., Temp. Col. A. H. Tubby, M.B., F.R.C.S., Temp. Col. W. H. Willcox, M.D., F.R.C.P., Major J. G. Bell, R.A.M.C., Lieut. W. N. Rishworth, R.A.M.C.

Royal Army Medical Corps (T.F.).—Lieut.-Col. E. V. Gosling, Major (temp. Lieut.-Col.) C. H. Lindsay, M.D.

Canadian Army Medical Corps.—Lieut.-Col. F. Etherington, Lieut.-Col. S. H. McKee, Major E. G. Davis.

OBITUARY.

DR. F. H. VILLANUEVA, L.R.C.P. AND S., L.S.A., PECKHAM.

We regret to learn of the death of Dr. Francis Horton Villanueva, of Peckham-road, who died on April 29th, after having been in failing health for some time. Educated at Charing Cross and Birmingham, he qualified L.M. Dublin in 1876, and L.S.A. in 1880. The deceased gentleman, who was for many years medical officer to the Camberwell Dispensary, was the son of Fernando Pedro Joaquin Lorenzo Francis Javier Villanueva, Spanish Consul for Birmingham for 40 years, and nephew of Joaquin Lorenzo Villanueva, Ambassador to the Court of Rome. His father was the son of Lorenzo Jadeo, Marquis of Villa Franca.

MEDICAL NEWS IN BRIEF.

Treatment of Venereal Diseases.

In the House of Commons on May 4th, Mr. Asquith, replying to Mr. King, stated that the Government have decided to adopt the recommendations of the Royal Commission as to the diagnosis and treatment of venereal diseases, and arrangements were being made accordingly. It had been decided that 75 per cent. of the cost of these arrangements, which it was hoped might be undertaken with the co-operation of the local authorities, should be defrayed by means of a grant from the Exchequer. He could not at the moment promise legislation on the other recommendations of the Commissioners, some of which raised very controversial questions, but the whole matter was receiving the earnest attention of the President of the Local Government Board.

Sheffield Panel Doctors' Loss.

The Clerk (Mr. W. E. Hart) has made an interesting report to the Finance and General Purposes Sub-Committee of the Sheffield Insurance Committee, with regard to the amount available from the Insurance Commissioners for medical benefit.

He points out that the sum of £6,628 7s. 5d., which the Commissioners had credited for settlement in respect of medical benefit for the period ended December 31st, 1914, was considerably less than that which the Committee might have expected to have received in view of the average counts of the register for that period, as compared with the year 1913. Though there were 12,022 more insured persons on the register in 1914 than in 1913, instead of receiving £3,497 10s. 5d. more than was received in 1913, the Committee are actually receiving £3,650 14s. 9d. less.

In the year 1913 the credit was based on a capitation rate of 8s. 5.16d., such being the proportion of 8s. 6d.

for the medical year, which was three days less than a full year, and at this rate the number of insured persons was 152,500, which implied that the register was inflated by 4,420 insured persons, or about 3 per cent. As the medical year 1914 was eleven days short of a full year, the amount of the capitation fee is 8s. 2.936d., so that the Committee are being credited with 147,082 insured persons, an inflation of 21,860, or a percentage of 12.94.

The amount available for payment to practitioners—namely, £48,863 2s. 7d. (which includes £3,494 19s. 9d. transferred from Sanatorium Benefit Fund in respect of domiciliary treatment), is only sufficient to pay practitioners 95.12 per cent., or 19s. 0.287d. to the £ for the number of insured persons on their lists. This means that the doctors will be discounted on their actual lists, and will receive no payment in respect of over 17,000 insured persons who have made no choice of doctor.

At the next meeting of the Insurance Committee, the Finance and General Purposes Sub-Committee will make a request to the effect that the Insurance Commissioners be asked to receive a deputation from the Committee, together with representatives of the Panel and Pharmaceutical Committees, for the purpose of laying before the Commission the views of the Committee regarding the serious diminution of the amount available to the Committee for medical benefit for the year 1914.

German Typhus Camps.

SIR E. GREY informed the House of Commons on May 2nd that in April and May, 1915, typhus was present in thirteen German prisoner camps in addition to that of Wittenberg, and that, according to unofficial reports, two of these—Altengrabow and Schneidemuhl—were abandoned by the Germans. In the case of another prisoner camp—Gardelegen—all the Germans deserted the prisoners except one doctor, who died at his post, and another who acted in a most praiseworthy manner.

Banstead Asylum.

THE London County Council have postponed until the end of the war further action on the scheme for remodelling the large blocks for patients at Banstead Asylum. The scheme provides for alterations which will permit of better classificaion and treatment of patients. The estimated cost of the work is £47,205.

Widow's Self-Sacrifice.

MR. P. J. DE PARAVICINI, presiding on May 2nd, at the annual general meeting of the Governors of King Edward VII. Hospital, Windsor, said that a bequest of £1,000 had been made to the hospital by a Mrs. Golden in accordance with a wish expressed by her late husband, a clerk for many years in a Windsor bank.

The amount represented Mr. Golden's accumulated savings, which had not been trenched upon by his widow, though her means were very limited. Mrs. Golden had even deprived herself of some of the necessaries of life in order to preserve the £1,000 intact. He thought that was a glorious instance of self-sacrifice.

The Late Sir William Turner.

AT a meeting of the Royal Society of Edinburgh, on April 28th, the first communication was an obituary notice of Sir William Turner, late Principal of Edinburgh University, by Sir James A. Russell. Sir William Turner, he said, was a man of the highest talent, eminently sane and workable, and absolutely free from the want of balance associated with genius. Next to the University of Edinburgh, the Royal Society of Edinburgh held a place near his heart, and of his more important contributions to science 39 were to be found in its Proceedings and 24 in the Transactions.

Cigarettes and "Soldier's Heart."

MR. TENNANT, replying to a question by Mr. J. M. Henderson, says:—"A certain number of cases of disordered action of the heart are occurring—the so-called 'soldier's heart.' This is being investigated in a hospital specially set aside for the purpose. We have no evidence that the number of cases is increasing at present. By some observers this condition is attributed to excessive cigarette and tobacco smoking, and this is being looked into by skilled experts."

Italian Doctors Called Up.

ITALIAN doctors and surgeons between the ages of 41 and 46, and those belonging to the classes of 1876 to 1896 who have been previously exempted for physical infirmities, are called under arms, with the exception, however, of those employed in public sanitary work. They will receive a daily indemnity and officers' rank.

Herbalist's Claim.

AT the Leigh Military Tribunal on May 3rd, a herbalist, aged 26, claimed absolute exemption on the ground that he was in business as a herbalist practitioner. He said he was the only certified herbalist within eight miles, and that he had 40 or 50 visits a week and 200 patients.

Alderman Hunter: Could you not get a medical man to take your place?

The Applicant: Medical men know as much about herbs as a cat knows about the moon.

The Mayor said they would adjourn their decision until June 6, but they advised him to make all the arrangements he could with a view of going into the Army later.

A Doctor's Conscientious Objections.

AT the statutory May meeting of Argyll County Council, held in the Court House, Inveraray on May 4th, a report submitted by Mr. J. W. Melles, of Gruinart, dealt with the case of Dr. J. C. MacCallum, Assistant Medical Officer of Health for the county, who was appointed Assistant District Medical Officer on November 17th, 1914. Dr. MacCallum, it was stated, made application to the Lorne District Tribunal for exemption on conscientious grounds. A letter of the clerk to Dr. MacCallum, dated April 22nd, requesting his attendance before the Council, and a reply from Dr. MacCallum, dated April 27th, declining to be present, were read. The Committee having very carefully considered the matter, it was resolved, on the motion of the Chairman, seconded by Mr. Forbes, Islay, to recommend the County Council to give written intimation to Dr. MacCallum of their intention to dispense with his services as assistant medical officer of health from and after three months from the date of notice. The report of the Committee was adopted. Sir James Patten Macdougall ruled that the recommendation of the Committee must come up at the October meeting.

German Buying of Cod-Liver Oil.

A BRIEF reference has already been made in these columns to the rapid advance in the price of cod liver oil. Its value is now at least eleven times the normal figure, and is advancing almost every week. Before the war it could be bought at from 60s. to 70s. a barrel of 36 gallons, and now costs between 750s. and 800s. These are wholesale prices, and the retailer who buys a few gallons would have to pay a price which works out at something like 1s. 6d. for a half-pint bottle.

The amount of oil produced in Norway so far this season is well above the average, but Germany is buying all the oil she can secure and is paying partly in cash and partly in war loan. As the cash payment is about 50 per cent. of the amount of the sale, the producers will clear a good profit even if they lose the rest.

Southport Milk.

IN his annual report on the health and sanitary condition of Southport, Dr. George C. Barnes, the acting medical officer of health in the absence with the colours of Dr. J. J. Weaver, the medical officer, states that the abnormally large number of milk samples reported "short of fat" was due, among other causes, to the weak action of the petty sessions magistrates when adjudicating on cases under the Food and Drugs Acts, and to the greatly restricted use of ground feeding stuffs or dairy meals consequent on increased prices.

Care of Dublin Wounded.

The following *communiqué* was issued by General Sir John Maxwell on May 7th:—

"I desire to express my sincere appreciation of the services rendered during the recent disturbances in Dublin by the medical, surgical, and nursing staffs of many of the city hospitals, and in particular of the gallantry shown by those nurses who exposed themselves to a heavy fire in attending to and removing the wounded.

"Also to the members of the Red Cross and St. John Ambulance Societies and the many medical men and private individuals who gave assistance in attending to the wounded or placed their houses at the disposal of the military for use as dressing stations. In numerous instances these services were rendered at considerable personal risk and under circumstances reflecting the greatest credit on those engaged in them."

Central Medical War Committee.

The following letter from Dr. H. Nicol appears in the *Morning Post* of May 8th:—

Sir,—As the details of the Military Service Bill are now being considered by Parliament, I would suggest that the position of the Central Medical War Committee should be defined in that measure. At present, doctors who enrol do so through the Committee, which selects out of the whole number men as required by the R.A.M.C. It is of the first importance that under compulsory service, the same arrangement should continue, and that the selection of *unenrolled* doctors be entrusted to the Central Medical War Committee, both in justice to the medical profession and to the civilian population.

I am, etc.,

South Kensington, May 6th. Hamish Nicol.

Patients of Recruited Panel Doctors.

At the meeting of the Insurance Committee for the County of London at Spring Gardens on April 27th, the following recommendation was received from the General Purposes Sub-Committee: "That the order of reference to the Special (War Emergency) Sub-Committee be amended as follows, and as thus amended be approved until further order: To consider and report as to the position of medical practitioners on the panel who have joined or who may wish to join his Majesty's Forces, and the arrangements made by such practitioners for the provision of medical treatment for the insured persons on their panel lists during their absence, and particularly as to the deputies appointed by them; to consider as to the requirements of the dispensing service for the area, and after consultation with the Pharmaceutical Committee to submit to the military representatives a list of persons whose services in the dispensing of medicines are indispensable to the needs of the general population; and that the reference to the Medical Benefit Sub-Committee, so far as it relates to these matters, be suspended."

Cod Liver Oil and Malt for Children.

At a meeting of the Swansea Medical Inspection Sub-committee of the Education Authority, on May 3rd, a letter was read from the Board of Education declining to sanction the supply of cod-liver oil and malt as part of the treatment for anæmic children. It was decided, if the parent could not afford the medicine, to supply it under the provision of meals administration.

Women Druggists.

Since the beginning of the war there has been a large increase in the number of women students of pharmacy, and at present there are as many women students as men at some of the principal schools of pharmacy. Before the war there were at the most only a few hundred women on the chemists' register and very few of these were actually employed in chemists' shops. Now such is the demand for women assistants to take the place of young men that any woman pharmacist who advertised for an appointment would receive many offers at salaries ranging from £100 to £200 a year.

Notification of Diseases Order.

In the House of Commons on April 11th, Sir P. Magnus moved an amendment to Clause 5, providing that the fee to be paid to a medical practitioner for every case of notification of disease by him should be, except in the case of measles, 2s. 6d., instead of 1s. as provided in the Bill.

Mr. Hayes Fisher opposed. This economy was suggested by the Retrenchment Committee.

The amendment was negatived without a division.

Royal College of Physicians of London—The Fellowship.

The following members of the Royal College of Physicians have been elected Fellows:—J. A. Arkwright, E. A. Cockayne, M. G. Foster, C. E. Lakin, H. L. McKisack, J. M. H. MacLeod, C. H. Miller, and H. W. Wiltshire.

The undermentioned, having passed the required examinations, have been admitted to membership of the College:—A. G. Anderson, R. Hill, W. MacAdam, and H. H. Scott.

Dental Scholarships.

The following entrance scholarships of £20 each in Dental Mechanics have been awarded at Guy's Hospital:—Open scholarship, A. F. Bartle; pupils' scholarship, R. S. Roche.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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Original Articles or Letters intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

SUPPLEMENT OF THE IRISH MEDICAL ASSOCIATION.

In consequence of the disturbed condition of Dublin, and the difficulties which beset printing establishments, we are unable to issue the usual fortnightly supplement, which is posted to all members of the Association. As matters are gradually assuming normal conditions, we anticipate being able to issue the supplement next week.

CITY STREET ACCIDENTS.

During the first quarter of this year 243 accidents caused by vehicles occurred in the City of London, of which two were fatal and 241 resulted in personal injury. Of these 126 were caused by horse-drawn vehicles, 11 by tramway-cars, 47 by motor-cars, 57 by motor-omnibuses, six by motor-cycles, and 16 by ordinary cycles.

EXCHANGING CHILDREN.

Manchester Guardians are in communication with some of the London Poor Law authorities with the idea of exchanging children in cases where it is advisable to have them removed from the undesirable influence of their parents.

Dr. W. M. C. (Montreal).—A letter addressed to Sir Alfred Keogh, K.C.B., Director-General of the Army Medical Service, War Office, London, S.W., would probably elicit the necessary information.

MATRIMONIAL MISTAKES.

Sir John Brunner, at the annual meeting of the Divorce Law Reform Union, said nobody would doubt that there had been more unfortunate matrimonial mistakes during the war than there were before.

WOMEN AMBULANCE DRIVERS.

It will be necessary soon to staff the Western Ambulance Station of the Metropolitan Asylums Board with women drivers owing to the further depletion of the motor driving staff by the calling up of men to join the forces.

THE INCORRIGIBLE.

OLD LADY: "And how did you get wounded, my poor fellow?"
THE HERO: "By not minding my own business, and interfering in this blooming war!"—*The Bystander.*

WOMEN DISPENSERS.

In the military hospitals women dispensers have been so successful that even men over military age are being ousted by the other sex. In fact, the women dispense without men and the hospitals dispense with men.—*Globe.*

CAPTAIN S.P.—The newest book, and the one we can recommend, is "Practical Manual of Bandaging," by Duncan C. L. Fitzwilliams, published by Bailliere, Tindall and Cox. It has been especially compiled for the purposes of the war.

SERUM AMPOULES

GLASS ampoules (to contain anti-tetanus and anti-typhoid serum for the troops), supplied by one of the largest surgical and medical glass instrument makers in the country, have been made by Girl Guides. Before the war all ampoules were imported from Germany.

£8,000 FOR NOTTINGHAM HOSPITAL.

MR. JOHN MERRYMAN, of Sherwood Street, Nottingham, left estate valued at £8,129, of which £5,142 is net personalty. He bequeathed £100 to the Amalgamated Society of Engineers, held at the house of Daniel Dominic. The residue of his estate, estimated at about £8,000, to the Nottingham General Hospital.

WOMEN SANITARY INSPECTORS.

THE Local Government Board have sanctioned the appointment of two women as sanitary inspectors at Greenwich.

M.D.BRUX.—Colloidal silver, known as "Electrargol," is being used for a variety of infective diseases, it is stated with success. In acute septic conditions, intravenous injections of the preparation have been recorded to yield good results.

WITTENBERG MEMORIAL.

A MOVEMENT has been started in Surrey to raise a memorial to the three brave doctors who died at Wittenberg camp from typhus whilst attending to suffering English prisoners.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, MAY 10TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF SURGERY, SUB-SECTION OF PROCTOLOGY) (1 Wimpole Street, W.).—5.30 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917. Papers—Lieutenant-Colonel Cuthbert Wallace: Rectal Wounds in the Present War. Mr. P. Lockhart Mummery: Injuries of the Rectum resulting from the War. Cases—Mr. P. Lockhart Mummery: Shell Wound of Rectum. Mr. Aslett Baldwin (communicated by): Gumma of Rectum mistaken for Malignant Disease. Lieutenant-Colonel Gordon Watson: Three Cases of Injury to the Rectum from Bullet Wounds.

MONDAY, MAY 15TH.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—8 p.m.: Annual General Meeting will be held to receive the reports of (1) Council, (2) Hon. Librarian, (3) Chairman, House and Finance Committee, and to elect Officers and Council for next Session.

TUESDAY, MAY 16TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF THERAPEUTICS AND PHARMACOLOGY) (1 Wimpole Street, W.).—4.30 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917. Discussion on "The Treatment of Diabetes by Alimentary Rest" will be opened by Dr. O. Leyton. Dr. Spriggs, Mr. Joseph Barcroft, F.R.S., Dr. Ryffel, and Dr. Langdon Brown will take part.

ROYAL SOCIETY OF MEDICINE (SECTION OF PSYCHIATRY) (1 Wimpole Street, W.).—6 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917.

Vacancies.

Lewisham Borough.—Tuberculosis Dispensary Medical Officer. Salary £250 per annum. Applications to Edward Wright, Town Clerk, Town Hall, Catford, S.E.

Royal Victoria Hospital, Folkestone.—Resident Medical Officer. Salary £200 per annum, with board and laundry. Applications to Secretary.

St. Giles, Camberwell.—Assistant Medical Officer for the Infirmary and Children's Homes. Salary £220 per annum, with apartments, board and washing at the Infirmary. Applications to Medical Superintendent, Camberwell Infirmary, Brunswick Square.

Manchester Northern Hospital for Women and Children, Park Place, Cheetham Hill Road, Manchester.—Lady House Surgeon. Salary £120 per annum, with apartments and board. Applications to Mr. Hubert Teague, Secretary, 38, Barton Arcade, Manchester.

Bootle Borough Hospital.—Junior House Surgeon. Salary £170 per annum, with board, lodgings, and laundry. Applications to the Secretary, 71, Oriel Road, Bootle, Lancs.

Victoria Hospital, Burnley.—Female House Surgeon. Salary £160 per annum, with residence, board, and washing. Applications to F. A. Hargreaves, Hon Secretary, 7 Grimshaw Street, Burnley.

Bolton Infirmary and Dispensary.—Second House Surgeon. Salary £200 per annum, with apartments, board and attendance. Applications to Albert E. Briscoe, Secretary.

County Borough of Dewsbury.—Lady Medical Practitioner. Salary £300 per annum. Applications to H. Ellis, Town Clerk, Town Hall, Dewsbury.

Births.

BARENDT.—On May 3rd, at 65 Rodney Street, Liverpool, W., the wife of Frank Hugh Barendt, M.D.Lond., F.R.C.S.Eng., of a daughter.

CRAGG.—On May 1st, at Wymering, Hampshire, to Cecil Claude Cragg, M.D., Lieut, R.A.M.C., and Florence Everilda, his wife, of Lethbridge, Canada, a son.

DOTTRIDGE.—On May 4th, at 12 Portland Court, W., the wife of Cecil A. Dottridge, M.B., of a daughter.

HEDLEY.—On May 2nd, at 40, Pont Street, the wife of E. W. Hedley, M.D., Capt., R.A.M.C.T., of a daughter.

HEWLETT.—On April 29th, at Redstede, East Grinstead, to Professor and Mrs. R. Tanner Hewlett, a son.

JONES.—On May 4th, at Walmer House, Aldridge, to Margaret, the wife of Captain R. Francis Jones, R.A.M.C. (on active service)—a daughter.

JOY.—On May 3rd, at Manor House, Tamworth, Staffs, the wife of C. H. Joy, M.D., of a son.

MILNE.—On May 4th, at 24 Elsworthy Road, Regent's Park, the wife of Robert W. Milne, of a son.

NICHOLSON.—On May 2nd, to Dr. and Mrs. W. A. Nicholson—a son.

STEPHENS.—On May 5th, at St. Giles, Malvern Link, Worcestershire, the wife of H. N. Stephens late Staff Surgeon, Royal Navy—a son.

STEVENSON.—On April 28th, at "Kiama," Weybridge, the wife of Lieutenant W. E. Stevenson, R.A.M.C., a son.

Marriages.

FEHRSEN—NICHOLSON.—On May 1st, at S. Augustine's, Kilburn, Guy Fehrsen, Lieutenant, R.A.M.C., son of the late A. J. Fehrsen, M.D., and Mrs. Fehrsen, of Kroonstadt, S. Africa, to Dorothy Edith Warren, elder daughter of the Rev. J. B. Nicholson, C.F., and Mrs. Nicholson, of Swindon.

GREAVES—TENNANT.—On April 26th, at St. Luke's, Torquay, Edward Harrison Greaves, M.R.C.S., L.R.C.P.Lond., of Penrith, Cumberland (late of Amersham, Bucks), to Emma Hope Tennant, of Green Bank, Rawdon, Yorks.

JACOB—ROECHLING.—On April 28th, at Radlett, Lancelot George, Lieutenant, R.A.M.C., elder son of George Jacob, I.C.S., and Mrs. Jacob, of Clifton, Radlett, to Margaret Sophia, youngest daughter of H. Alfred Roechling, M.I.C.E., and Mrs. Roechling, of High Fields, Radlett.

MCLAY—BARTLETT.—On May 6th, at Holy Trinity Church, Folkestone, Samuel McMurrich McLay, Captain, R.A.M.C., second son of Dr. and Mrs. Archibald McLay, of Woodstock, Ont., Canada, to Florrie, only daughter of Mr. and Mrs. W. J. Bartlett, of Woodstock, Ont., Canada.

PEGG—GILBERTSON.—On April 29th, at St. Saviour's Church, Hitchin, John Henry Pegg, B.A., M.R.C.S., L.R.C.P.Lond., of Reigate, to Kathleen Elsie, younger daughter of Dr. and Mrs. J. H. Gilbertson, of Hitchin.

ROBERTS—BROOKS.—On May 2nd, at Presbyterian Church, Kingston-on-Thames, Captain Alan T. Roberts, R.A.M.C., son of Mr. William Roberts, of Sydney, N.S.W., to Marjorie, daughter of Mr. and Mrs. William Brooks, of Sydney, N.S.W.

SMITH—BINNIAN.—On May 2nd, at St. Mark's Church, Hamilton Terrace, T. F. Hugh Smith, F.R.C.S., of Farningham, to Alice Charlotte (Peggy), second daughter of T. W. Binnian, of Kidderminster.

THATCHER—ANNANDALE.—On April 27th, at the Episcopal Church of St. Leonard's, Lasswade, Midlothian, Lewis Hay F. Thatcher, M.D., F.R.C.P.E., Captain, Royal Army Medical Corps, eldest son of Charles H. Thatcher, F.R.C.S.Edin., to Sybil Muriel, third daughter of James H. Annandale, The Vale, Polton, Mid Lothian.

THWAITES—HUME-SPRY.—On April 26th, at Danbury, Essex, Captain Cyril E. Thwaites, R.A.M.C., of 6, Belvedere Road, Durdham Downs, Clifton, to Olive L. H. Hume-Spry.

Deaths.

CHESTER.—On May 5th, at Coney Gree, Up Hatherley, Cheltenham, Colonel William Litchfield Chester (late R.A.M.C.), son of the late Revd. Richard Chester, Rector of Middleton, Co. Cork, Ireland, aged 65.

DONALD.—On May 3rd, at 22 Oakley Street, Chelsea, Robert Donald, L.R.C.P.Edin., Captain, R.A.M.C., T.F., aged 55.

LOWNDS.—On April 28th, James Richard Lownds, M.R.C.S. and L.S.A.London, of The Elms, Newcastle-on-Tyne, and Prestwick Lodge, Northumberland, aged 82.

GODDARD.—On May 2nd, at 46 Montalt Road, Woodford, Essex, Bertram Goddard, M.R.C.S., L.R.C.P., second son of the late Eugene Goddard, M.D., in his 49th year.

HERSCHEL.—On April 25th, at Villa Carlotta, Bordighera, Italy, Lajos Kossuth Herschel, M.D., in his 69th year.

KROHN.—On May 5th, at Arosa, Switzerland, Ronald E. S. Krohn, M.D.London.

LEA.—On May 7th, at 7 Dunkirk Road, Birkdale, Southport, Arnold William Warrington Lea, M.D., F.R.C.S., late of 246 Oxford Road, Manchester, in his 49th year.

MANSFIELD.—On May 7th, at Royal Naval Hospital, Haslar, Gosport, Deputy-Surgeon-General C. J. Mansfield, R.N., M.V.O., in his 55th year.

ROBINSON.—On May 7th, at East Kirkby Manor, Spilsby, Lincs, Tom Robinson, M.D., late of Princes Street, Cavendish Square, aged 68.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

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AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

A Protest from Scotland.

My letter box has been unusually interesting of late. It has brought me communications from various districts dealing with such diverse subjects as the claim of Sydney Smith to be considered a wit, the teaching of venereal diseases, non-medical dietetic experts, and, that recurring decimal of dismal depression, the British Medical Association. On the first of these questions a correspondent, obviously from the North, writes as follows: "How can you say that Sydney Smith was one of the wittiest men which this country has produced, when it was he who said that it took a surgical operation to get a joke into a Scotsman's head? A remark like that stamps him as a stupid man." Whilst I cannot agree that one unfortunate remark is sufficient to brand a man as stupid, I am prepared to admit that if, having lived in Scotland, Sydney Smith had really said the thing which is so generally attributed to him, it would be sufficient seriously to detract from his reputation for delicate drollery. But he is innocent; he did not say this admittedly coarse and stupid thing.

The True Story.

THE true story is told by his daughter, Lady Holland, in her biography, which is thus quoted by Walter Jerrold: "William Chambers, in conversation with Sydney Smith, very justly claimed for the Scotch that they had, after all, a considerable fund of humour. 'Oh, by all means,' agreed the witty clergyman, 'you are an immensely funny people, but you need a little operating upon to let the fun out. I know of no instrument so effectual for the purpose as a corkscrew.'" Sydney Smith described real wit "in midwife's phrase, as a quick conception and easy delivery." With all due respect to those concerned, I do not think that this is exactly the type of wit which lives in the North and requires the corkscrew for its liberation.

Unsatisfactory Medical Recruiting.

I PASS from the sublime to the ridiculous; from Sydney Smith to the British Medical Association. A correspondent informs me, on what data I know not, that the recruiting of the profession for war purposes, inaugurated at, and managed from, 429, Strand, has not been successful. This is not surprising. It was obvious to anyone with any knowledge of the feeling in the profession that if the Central Medical War Committee did not definitely dissociate itself from the British Medical Association it would lose a great deal of the prestige and authority which were essential to its success. There has certainly been no lack of warning upon this point in these columns. I have from the outset been very anxious that the work of the Central Medical War Committee should succeed, but it required no Daniel to realise that it was very unlikely to do so if the British Medical Association, with its capacity for mismanagement, and its record of recreant renunciation was allowed to dominate the situation. My correspondent informs me that forasmuch as I ventured to point out the grave disadvantages to the cause of recruiting inherent in this sinister connection between the Central Medical War Committee and the British Medical Association, the latter body sought to compass my freedom by having me cast into prison. But liberty of speech is not yet dead in this country, and to criticise the British Medical Association has not yet attained to the level of *lèse-majesté*. I am still at large.

Compulsion and the Doctor.

THE coming of general compulsion will, of course, affect the medical profession, but it will affect it curiously. As I have already pointed out, the Act enforces service, but it does not enforce medical service. A doctor who has not enrolled can be taken for combatant or pseudo-combatant service, but he cannot be taken for service in his professional capacity. The best thing for medical men of military age to do is to enrol with the Central Medical War Committee; there will then be some chance that their special circumstances will receive adequate consideration, and, if called up, their special knowledge will be utilised for the good of the country. If, however, they allow themselves to be conscripted with Jones, the hairdresser, and Brown, the tallow-chandler, they will have to take their chances as conscripts, and become ordinary tommies, footsloggers, stretcher-bearers, or what not. It is, however, doubtful whether, in the changed circumstances, the Central Medical War Committee will continue its present work. I hear that a change is impending.

The Need for a Tribunal.

I understand that if by a certain date a sufficient percentage of medical men have failed to enrol on the voluntary principle, compulsion will be applied; and that the Central Medical War Committee will cease its enrolling activities and seek to obtain recognition as the Central Tribunal in Medical Affairs. It is sincerely to be hoped that the *dêmarches* in this direction will not be allowed to succeed. Sir Alfred Keogh must surely by now have realised the unwisdom of having recognised the claim of the British Medical Association to represent the profession. If the Director-General is not cognisant of the fact that suspicion and distrust dog the footsteps of this ill-fated body, even when it is engaged upon a laudable undertaking, it is not for want of having the fact urged upon him; and I imagine that he will think seriously before he again gives official backing to any "committee" which is composed mainly, if not entirely, of nominees of the Association. It is very desirable that there should be a Central Medical Tribunal to deal with medical cases (the lay element ought not to be tolerated), but it is even more important that the tribunal should be so constituted as to command the respect and secure the confidence of those upon whose cases it will have to adjudicate. The recently-appointed Committee of the two Colleges would not, by any means, be an ideal tribunal, but it would be better than the Central Medical War Committee, as at present constituted. Better still would be an entirely new body.

An Unenviable Task.

In any case, the lot of the Tribunal is not likely to be a happy one. If angels were to be sent from heaven to deal with the difficult cases which will surely arise, their findings would give rise to disappointment and their decisions to discontent. It is therefore certain that the work of merely mundane brains and sympathies, however well it may be done, will be subjected to an enormous amount of adverse criticism. And it is reasonable to suppose that, in a large number of cases, the bitterness thus engendered will be directed against the British Medical Association, which, in the gambler's spirit, has staked its all—what remains to it of credit and respect—upon a successful issue to this doubtful enterprise. Those who do not approve of the British Medical Association—and they are many—will contemplate with grim satisfaction its latest and most elephantine effort to play the part of Providence to the profession. In such an adventure an assembly of supermen could scarcely expect to succeed; in the case of the British Medical Association the issue may safely be left to the imagination of those who are acquainted with its methods. It digs its own grave with diligence and ingenuity.

The Treatment of Gonorrhœa.

I am sorry to have disappointed our friend Dr. Hamilton, whose letter appears in another column. And while agreeing with him in principle, I fear I must insist upon a divergence in detail. I did not intend to imply that the older views on the treatment of gonorrhœa were wrong; I have merely ventured to suggest that latter-day opinion attaches to the sequelæ of the disease an importance which was not emphasised when he, I, and others, assimilated "with avidity" the teaching of *x* years ago. Then, a gonorrhœal urethritis was regarded very much as a catarrh from any other mucous surface is still regarded, that is, an almost harmless nuisance, the ambulant treatment of which might be trusted to the patient. Now, a gonorrhœal urethritis is recognised as a condition which is fraught with very serious consequences, and latter-day views impose upon the practitioner the duty of warning the patient of the risks he has to face. Most surgeons who deal in these diseases do not, in the early stages, at any rate, entrust the treatment to the victim. They undertake it themselves in order that they may be sure that the disinfection is properly done. The danger of gonorrhœa, like the danger of syphilis, is partly the want of recognition in the early stages and largely the lack of vigorous and prolonged treatment when the diagnosis is certain. If this was taught in the old days I do not think the gospel reached the rank and file.

New Knowledge.

Dr. Hamilton enquires "How did they (the present teachers) get their knowledge?" The answer to such a question opens up a very wide field for discussion, into which I am not at present prepared to enter. This, however, I think I may say without offence, that men whose whole time is given over to the study of one branch of a subject may reasonably be expected to know more about the latest developments in the theory and practice of that branch than those whose energies are necessarily spread with some approach to impartiality over many fields of enquiry. I do not know, but I imagine that if Dr. Hamilton were to pay a visit to the Lock Hospital to-day, he would find that treatment there is very much altered from what it was in the days of Berkeley Hill and those who immediately succeeded him.

Mr. Eustace Miles.

I have received a courteously contentious letter from Mr. Eustace Miles, which is unfortunately too long for publication in *extenso*, in which he deals with a good many questions relating to ethics and dietetics. The most important debateable point which he makes is summed up in the following paragraph. "Well, then, just as he (the doctor) must recognise the expert in massage and physical culture (except for a few doctors, who have studied this important means to health); just as he must refer patients to them because he has not made himself master of these studies and practices; so why should he not try to learn all he can from dietetic experiments, instead of closing the door to their researches, by abuse?" This is, of course, a very specious argument which my readers will scarcely fail to recognise as a clever evasion of the real question at issue. Massage and "physical culture" are a means of treatment which may safely be entrusted to those who have special facilities for carrying them out, in cases which are deemed suitable by medical men. They are on the same plane with

drugs, the mere dispensing of which is handed over to a specially qualified chemist. The moment the masseur, the physical culturist, or the chemist takes upon himself to apply his remedies without the intervention of a medical man, he is arrogating to himself the competence to make a diagnosis and prescribe a suitable treatment, a pretension which even the ordinary common sense of the ordinary man, to say nothing of the medical man, cannot possibly concede to him.

The Fallacy.

If Mr. Eustace Miles were to place himself on the same plane with these others and be content to carry out the dietetic prescriptions of qualified medical men, I for one would not quarrel with him. But he does a great deal more. He makes a diagnosis and prescribes a treatment, and in so doing he invades the territory of regularly qualified practitioners, which, as he is not himself regularly qualified, is a position which we cannot possibly recognise. Mr. Eustace Miles may very likely know, as he claims to do, a great deal more about foodstuffs than we do. But then, an intelligent dispensing chemist could teach most of us a great deal about the behaviour of drugs and the properties of particular preparations. In neither case does this special knowledge entitle the holder to speak with us on equal terms of problems in physiology, pathology and therapeutics.

Dogs not Under Control.

I offer my humble congratulations to Dr. Pritchett, the Medical Officer of Health for Rochester, as being, so far as I know, the first health officer to raise his official voice against a dangerous, disgusting and selfish nuisance to which I have frequently called attention in these columns. In his recently-published Annual Report to the Town Council, Dr. Pritchett writes as follows:—"The City of Rochester is infested with an extraordinary number of dogs, which are to be seen wandering about the streets, singly or in groups, at all hours of the day, and without being under the slightest control. A dog unless he is employed to some useful purpose, is a luxury, and the people who want to enjoy such luxuries should pay for them, particularly as their enjoyment inflicts annoyance, not to say danger, on other people. No person should be allowed to keep a dog in a town unless he can show that he is able to make provision for the dog's efficient sanitary care. Since the public conscience in the matter appears to be thoroughly callous, the proper thing to do would be to impose an additional yearly tax, say, of £2, on every dog kept in a town." I sincerely hope that Rochester will take notice of these wise words, and that in due course other cities will follow suit.

Dogs and the Food Question.

In the *Evening News* of May 5th there appeared an article on the "Cats of London," in which it is stated that "There is enough meat wasted on dogs every day in London to feed thousands of poor people. Big dogs costing seven and eight shillings a week to keep are owned by people who are helping to keep up the price of food by keeping these big animals often when their duty points towards helping human beings to have enough to eat. In London alone there are nearly 180,000 dogs, and in Greater London, which includes the County of London, there are more than a quarter of a million, all needing food every day, all helping to keep up the prices of food." It is extraordinary that these facts are not faced by the authorities who are for ever preaching economy. A very little legislative or administrative attention would soon put an end to such a scandalous state of matters.

Cats and the Milk Supply.

On the question of cats themselves, the article is instructive. There are, it seems, no available statistics relating to cats, but the writer estimates the number in London and Greater London to be about 750,000. If half of these are given a saucer of milk a day, which is a moderate estimate, "they would lap up 12,000 gallons of milk a day, costing £1,200 a day, or over £8,000 a week. These 12,000 gallons of milk would give a pint of vital food to over 90,000 poor children; they would ensure more than a quart of milk each day for every necessitous child now being fed by the London County Council." The plea in favour of the cat which I quoted in a recent issue—namely, that it keeps down rats and mice, would seem to be more than counter-balanced by these figures. After all, it ought to be possible to limit these rodents, and even entirely to exterminate them, by some means less costly than the keeping of cats, many of which are indeed too pampered by milk and other delicacies to trouble about hunting their natural prey. But the most serious indictment which is brought against the cat is not its extravagance, but its disease-carrying propensities. It has been said many a time and oft that diphtheria had been traced to cats, but the evidence on this point has never been conclusive. It seems that bacteriological investigations have recently shown that cats really are frequent "carriers" of the Klebs-Loeffler bacillus and that consequently the most "harmless, necessary" domestic pet may be a source of very grave danger to the inmates of the nursery. That cats, like all domestic animals, disseminate almost every variety of "ringworm" is well known. There is thus good reason for the suggestion that these animals should be registered and taxed.

Sinapis.

Miss Elizabeth Simpkins, of Brighton, bequeathed £5,000 to the Sussex County Hospital, as a further memorial to her brother; £1,000 each to the Royal Alexandra Hospital for Children, Brighton; Brighton and Hove Branch of the Surgical Aid Society; Throat and Ear Hospital, Brighton; Eye Hospital, Brighton; Asylum for the Blind, Brighton; and the Asylum for Deaf and Dumb Children, Brighton; £500 to the Crèche, Brighton.

Mr. Thomas Taylor, of Blackpool, left £1,000 each to the Children's Hospital, Pendlebury, and the Ashton Infirmary, and a further £1,000 to the last-named institution, if the residuary estate will permit, for the endowment of children's cots in memory of his brother and sister.

CURRENT TOPICS.

The Illicit Use of Cocaine.

The need for reform in medical jurisprudence is strikingly illustrated in connection with the laws governing the acquisition and sale of cocaine. A case brought up at Bow Street Police Court of a man who was arrested in Leicester Square while offering for sale pill-boxes each containing one and a half grains of cocaine had to be dismissed because it did not come under the rules of unlawful possession, and because no actual sale had been proved. Counsel stated that "the prisoner was one of a number of men who were engaged in a most wicked and dangerous traffic with cocaine in the West End," also that "the use of cocaine was now largely on the increase among prostitutes and some soldiers, and the drug was being illicitly imported into this country." The only effort at remedy so far reported is an order under the Defence of the Realm Regulations, which prohibits the sale of cocaine, opium, and some other drugs to any members of his Majesty's Forces, unless ordered by a practitioner in a written prescription and marked "Not to be repeated." Some months ago we drew attention to the grave danger to which foolish people were exposing friends at the front by giving them supplies of morphia and other such drugs. That the evils and prevalence of this drug habit are recognised elsewhere is very evident from the editorial of a recent number of the *Canadian Journal of Medicine and Surgery*. The Editor, while recording the third case of a medical practitioner convicted for the illicit sale of cocaine, puts forward a plea that any practitioner so convicted should be deprived of his licence for the first offence. Other preventive and remedial measures advocated are:—(1) The forcible arrest and detention of the drug victims for the purpose of treatment; (2) public education by means of lectures and literature, as well as by the teaching in schools; (3) complete Government control of the importation and sale of the drug.

The College of Nursing, Limited.

Mr. Arthur Stanley, having failed to make any impression on the nursing organisations in his endeavours to lure them into his "College of Nursing, Limited," is now attempting to inveigle the nursing schools into his scheme. He has issued a letter to the heads of some two hundred of the nursing schools of the United Kingdom in which he invites them to nominate persons for seats on his Consultative Board. The Consultative Board, however, is not to possess any powers beyond the right to express opinions which the Council of the College may or may not accept. However, the acceptance of Mr. Stanley's invitation does not give the nominee of a nursing school the right to sit on the Consultative Board. Mr. Stanley reserves for the Council the right to select from all the nominations submitted those who are to constitute the Consultative Board. One would think that, having been thus selected by the Council and having no powers, the Consultative Board would be sufficiently harmless, but Mr. Stanley has got another safeguard to prevent any possibility of its becoming troublesome. We quote his own words: "For facilitating the work of the Consultative Board, the Council has formed a Consultative Committee, with power to add to its numbers from amongst persons appointed on the Board, so that business may be put before the full Board in such a way as not to make too great claims upon the time of its members, many of whom can only give occasional attendance in London." To put it plainly, the Executive Committee of the Board is elected by the Council, and it may or may not contain a single member of the Board. We hardly think that the authorities of the nursing schools are to be fooled by such an impudent proposal as this. They are asked to commit themselves to the support of Mr. Stanley's scheme without being given the slightest influence in moulding it either in its formation or its development.

Reports of Factory Surgeons.

One of the most inept of the recommendations in the Report of the Committee on Retrenchment in the Public Expenditure is that the inquiries and reports of certifying surgeons on accidents occurring in factories and workshops should be dispensed with, since such reports are alleged to be of little value and to entail duplicates of reports of inspectors. It is to be noted that the total sum involved is only £12,500 a year, and it is, perhaps, typical of the official mind that such a beggarly item should be selected for economy. We have made a computation, however, and we find that the sum to be saved by the proposed economy would pay for three minutes and thirty-six seconds of the war! The function of the Committee on Retrenchment was, however, to deal with economies which might be practised "without detriment to the interests of the State," and there are good reasons for holding that this particular economy would be highly detrimental. The Incorporated Association of Certifying Factory Surgeons has dealt with the proposal in all its aspects in a temperate and logical memorandum which will well repay study. We have not space here to recapitulate the arguments, but they appear to us to be cogent in showing that there is not a true duplication in the reports of the surgeon and of the inspector, that the cessation of the surgeon's reports would deprive the workman of certain valuable safeguards, and that the technical knowledge of the surgeon is frequently the determining factor in assessing the correct causation of an accident. While arguing against the total abolition of the surgeon's reports, the Association admits that certain economies are practicable.

The Ætiology of Common Colds.

Controversy on the subject of the ætiology of colds has waged a lengthy warfare. The common theory of bacterial infection has been held up by the investigations of Kruse. He discovered that the nasal secretion of a person suffering from coryza when passed through a Berkefeld filter, and therefore deprived of bacteria, was capable of inducing a similar cold in a healthy subject if brought into contact with the nasal mucous membrane. Yet he was unable to demonstrate the presence of living organisms in this filtrate by any bacteriological methods, and he therefore decided to class the organism among the filterable viruses. His results have been confirmed by Captain G. Foster, whose further investigations are described in a paper published in a recent number of the *Journal of the American Medical Association*. Following the methods used by Noguchi and Flexner in the cultivation of the filterable virus of rabies and of that of poliomyelitis, Foster succeeded in obtaining microscopic evidence of the growth of the virus of colds in a culture made from the filtrate in tissue-ascitic fluid. Subcultures were made to the fourth generation, and in each of these the visible changes were more marked than in the original culture tube. Their virulence was directly proved, for material taken from these subculture tubes, filtered and diluted so that the ultimate mixture contained but 1 part in 90,000 of the original nasal secretion, was

dropped into the nostrils of eleven healthy men, who all became ill with acute colds within forty-eight hours. We will have to mitigate the contempt with which we treat our common colds if their cause may thus be classed with the causes of such obscure conditions as rabies and poliomyelitis. In this connection, therefore, the work of Captain Foster may prove to be of the greatest value. Other investigators have come to the conclusion that common cold may be due to any one of several different organisms, and the results of vaccine therapy support this view.

Meningococci Carriers.

Dr. Berzancon, of the Paris Faculty of Medicine, in a recent communication remarks that most frequently the germ carrier is quite healthy, in some cases there is catarrh of the rhinopharynx, and in others there are slight symptoms of meningitis. The transmission of meningococci from healthy children or soldiers explains why contagion may take place unobserved. A French Ministerial order prescribes the bacteriological examination of the rhino-pharyngeal mucus of the persons living in close contact with the patient when a case of cerebro-spinal meningitis is notified. In barracks, any men found to be germ carriers are immediately isolated. The treatment applied to germ carriers consists in inhalations with iodine (Vincent), painting the pharynx with iodine and glycerine (1 in 30), gargling with peroxide of hydrogen (1 in 10). In children, he remarks, milder antiseptics must be used.

Birkenhead School Clinics.

The annual report of the School Medical Officer of Birkenhead, Dr. Robert S. Marsden, states that during 1915 there was an increasing demand for remedial work and treatment at the school clinic. There was a large increase in the treatment given for diseases of the ear. Dr. Marsden points out that, unfortunately, in these cases parents do not seem to co-operate as they should by seeing that affected children attend regularly at school clinic, with the result that recovery is often seriously retarded. In regard to defective vision, the Board of Education sanctioned the expenditure by the committee of a sum not exceeding £50 on the provision of inexpensive spectacles to those children whose eyesight is found defective on medical inspection, and in whose cases the committee, after inquiry, are satisfied the parents are unable to provide the whole or part of the cost of the spectacles. During the year 144 pairs of spectacles have been obtained, of which 134 pairs have been obtained with the help of the committee at a cost of £25 5s. Owing to the present conditions, whereby hospital staffs have been either depleted or otherwise engaged on war work, diseases of the eye and ear have been given special treatment.

The clothing and footgear of the children have, on the whole, been found to be fair, but there is much room for improvement. Much stress has been laid on the question of footgear in dealing with the parents, and suggestions made as to the type to be worn—that the clogs are warmer, more impervious to damp, and more economical to use. The same clothing is used winter and summer, and the use of the overcoat is not general. Many children on a wet day come to school without them. These children sit down in school "steaming," and many illnesses may be traced to this practice.

Taken on the whole, nutrition has been average, though in many cases it has been found sub-normal. The opinion is expressed that unsuitability of food is more to blame than insufficiency. Dr. Marsden emphasises the fact that, not only the *filling* of the child should be considered: it is as important that the proper proportion of nutritive material should be given to supply the demands of the various growing tissues. He affirms that the defective condition of the teeth is undoubtedly the most prevalent fault in the condition of school children, and calls for very urgent treatment. A complete set of perfect teeth is rarely seen.

The London and Counties Medical Protection Society, Ltd.

We have perused with interest the Annual Report (for 1915) of the Council of the above Society. Since its inception, in 1892, the Society has done excellent work for its members, and indirectly for the profession in general, and we are glad to note the statement that in 1915, notwithstanding the special anxieties of the year, the results have been quite satisfactory, and the steady progress made by the Society, since it was founded nearly twenty-five year ago, continues unbroken.

During the past year 560 members asked advice and assistance, and in the great majority of cases, satisfactory results were obtained without recourse to litigation, and the results of the cases in which litigation was needed were also satisfactory.

Details of the special cases are embodied in the report.

Reference is made to the great loss the Society sustained in 1915 by the death of its President, Dr. G. A. Heron, and the Society also lost two highly-valued Vice-Presidents—Mr. Edmund Owen and Dr. Robert Boxall. The war has taken its toll from the members of the Society, several having lost their lives on the field of battle in the service of their country.

Sir John Rose Bradford has been elected President of the Society in succession to the late Dr. Heron.

We are glad to learn that the financial position is exceedingly satisfactory, and that there is a considerable increase in the funds of the Society. Membership only involves an entrance fee of 10s. with an annual subscription of 20s. Every medical man should insure himself against many of the risks of medical practice by joining an association with objects such as those of the London and Counties Medical Protection Society.

PERSONAL.

Her Majesty the Queen has consented to open the New South London Hospital for Women, Clapham Common, on July 14th. The cost of the actual building has been entirely defrayed by generous friends, but an appeal is being made for funds to equip and maintain it. The hospital will be run and staffed entirely by women.

The new Director of Recruiting, Brigadier-General A. C. Geddes, graduated M.B. at Edinburgh in 1903. He was gazetted on December 9th, 1915, as a Deputy Assistant Adjutant-General.

The Royal College of Physicians of Edinburgh has resolved to offer its diploma of membership to Major H. E. Priestley, Captain A. C. Vidal, and Captain J. L. Lauder, in appreciation of their conduct as physicians at Wittenberg.

Dr. Andrew Campbell, Edinburgh, has been appointed resident surgical officer of the Birmingham and Midland Eye Hospital. Dr. Campbell was educated at the Grammar School, Aberdeen, and Edinburgh University, where he graduated M.B., Ch.B., in 1910, and D.P.H. in 1913. For the last three years he has worked under Dr. Logan Turner in the Ear, Nose and Throat Ward, Royal Infirmary, Edinburgh.

ORIGINAL PAPERS.

THE TREATMENT OF BACKWARD DISPLACEMENTS OF THE UTERUS.*

By FREDERICK J. McCANN, M.D.Edin., F.R.C.S.Eng.

Surgeon to the Samaritan Free Hospital for Women, London, N.W.

(*Concluded from page 422.*)

TREATMENT OF BACKWARD DISPLACEMENTS IN PAROUS WOMEN.

BACKWARD displacements frequently develop after a confinement or abortion, when, in consequence of the supports being slackened, the enlarged uterus falls backwards. Here, however, the pessary has its most useful application, and if worn for six months a cure will result. This being so, it is obvious that preventive treatment is of paramount importance in order to help in reducing the enormous number of women so afflicted.

The best method of so doing is to make it a rule that every woman should be examined from four to six weeks after labour in order to determine the state of the uterus and adnexæ, the vaginal walls and perineum. If this were done it would diminish markedly the number of women who are suffering from prolapse and displacements. Treatment could at once be applied to the uterus, vaginal walls and perineum before marked changes had been produced. Unfortunately, women are anxious to get rid of the doctor as soon after the confinement as possible, and a visit for further investigation might be resented. But after all, the doctors should be the guide of their patients in this regard, and must educate them to appreciate the value of such an investigation. Unless this is done we shall continue to blunder along in the same old way, doing nothing to prevent what is easily preventable.

It has been recently asserted, but with limited proof, that early rising after childbirth tends to prevent backward displacements. If this be so it will be a great gain, but at present I am still in favour of rest in bed after labour, but during this period exercises and later massage may be usefully employed. Massage is of great benefit when the abdominal muscles are poorly developed, or when the abdominal walls have been overstretched. A woman who has suffered from a displacement previous to her pregnancy should have a longer period of rest after her confinement.

When a chronic displacement is encountered in a parous woman, it is essential to make sure that there is no defect in the perineum or vaginal walls, no chronic metritis, or inflammation of the adnexæ. All these must be taken into account before deciding upon the appropriate treatment. No "cases" require greater experience in deciding on what to do and how to do it, and the ability in selecting the correct treatment stamps the master.

It will be found that apart from those examples following a labour or abortion, nearly all the chronic types will require some form of surgical treatment. The part or parts of the suspensory mechanism which are at fault have to be determined and suitably remedied. There is no one operation or one treatment for this condition. Indeed, one must view with considerable mistrust the surgical judgment of any operator who within a limited period of time can furnish a long list of patients treated by one operation. One operator, after an experience of nearly 700 cases, came to the conclusion that his method was radically wrong. An honest confession, no doubt, but what a slaughter of the innocents!

When I tell you that over 100 operations have been devised for the treatment of backward displacements, each of which according to the originator is the best, I may be pardoned for dwelling upon this theme. A peculiar type of egotism seems to seize those who originate such operations, for they at once convince themselves that their operation yields the best results and is universally applicable.

My own experience leads me to the conclusion that as all the cases are different so the treatment must vary according to the extent and character of the pathological changes encountered. At the same time there are certain broad principles which should govern the treatment. Foremost amongst these is the age of the patient. Is she of childbearing age, or has her menstruation ceased? If of childbearing age, the possibility of further pregnancy should be remembered, and any treatment tending to cause interference therewith should be avoided. If past the climacteric, the pregnancy factor is eliminated. Again, surgical treatment should aim at restoring as far as possible the normal anatomical relationships, and not substituting one deformity for another. Further, the cure should be such that it can withstand the strain of future pregnancies.

To find in a parous woman a backward displacement without any other complication is rare; generally parturition has left its mark on the body or cervix of the uterus, the vaginal walls and the perineum, or, in addition, on the appendages, pelvic peritoneum and cellular tissue. The abdominal walls, too, may have suffered, remaining overstretched, thin and atrophic, whilst a general ptosis of the abdominal viscera may be an additional complication.

Let us see, then, what treatment should be adopted during the childbearing period—(1) when the uterus is replaceable, and (2) when it is fixed:—

(1) *When the Uterus is Replaceable.*—(*a*) The uterus displaced backwards without relaxation of the vaginal walls and the perineum sound. Here a trial may be given to pessary treatment for six to twelve months, and if it fails, surgical treatment should be advised. Such cases, however, are not common.

(*b*) The uterus displaced backwards with slight descent, relaxed vaginal walls and deficient perineum. Here a repair of the vaginal walls and perineum should be done, and as a result the backward displacement may right itself.

(*c*) Uterus displaced backwards, slight descent, cervix fissured and thickened, relaxed vaginal walls and perineal deficiency. In addition to repairing the vaginal walls and perineum, the condition of the cervix requires attention, for if it remains enlarged it tends to act as a dilating wedge.

Fissures should be repaired, and if necessary a triangular piece excised from the anterior and posterior cervical walls, followed by accurate suture.

* A paper read before the Harveian Society, April 13, 1916.

This operation preserves the continuity of the canal, and is preferable to amputation of the cervix in the parous woman.

(*d*) Uterus displaced backwards, relaxed vaginal walls, perineal deficiency, abdominal walls thin and atrophic, with visceral ptosis. The vaginal walls and perineum should be repaired and massage exercises, etc., should be recommended. For the poorer classes an abdominal belt will be found to be of great assistance, whilst for those who can afford them properly fitting corsets should be obtained.

(*e*) Uterus displaced backwards and enlarged, causing profuse and irregular menstruation, vaginal walls relaxed, perineum deficient. In addition to vaginal and perineal repair, the operation of curetting is indicated.

(*f*) Uterus displaced backwards, accompanied by thickening in the cellular tissue laterally and posteriorly. Treatment should here be directed to the improvement of the chronic inflammatory deposits. Rest, counter-irritation, glycerine tampons, etc., should be tried. In the absence of tubal complication such cases are not suitable for an abdominal operation.

(*g*) Uterus displaced backwards, with a greater degree of descent. Vaginal walls not relaxed and perineum sound. An abdominal operation to remedy the uterine displacement and descent is indicated. Such cases are also not common.

(*h*) Uterus displaced backwards, with a greater degree of descent, relaxation of the vaginal walls and perineal deficiency. An abdominal operation will be required in addition to the vaginal and perineal repair. In estimating the amount of descent of the uterus or vaginal walls, examination in the supine position is unsatisfactory unless the woman is instructed to bear down, which will give a better idea of what the conditions are when she is standing erect.

(2) *When the uterus is fixed.*—When the uterus is displaced backwards and fixed the displacement is most frequently the result of a localised peritonitis, infective in character. In nulliparæ gonococcal infection is the most common cause, whilst in parous women there may be, in addition to the gonococcus, infection from other organisms following abortion or full time labour.

Gonococcal infection leads to an adhesive peritonitis, which tends to persist. The effects produced are seen to be most marked in and around the appendages, and thus it comes to pass that partial mobility of the uterus is not infrequent, although it cannot be replaced in its normal position.

The best treatment for partially mobile and for fixed uteri is to open the abdomen and deal with the complications which are found. It is advised that forcible replacement should be practised with or without the aid of anæsthesia. This brutal method should be definitely abandoned, for who can tell how much internal damage has been done? Through an abdominal incision the diseased parts can be inspected, and by the employment of conservative surgery the function of the appendages may be completely restored. The time element is of supreme importance, for the more chronic the disease the more likely it is to be attended with destructive effects.

Abdominal and Vaginal Operations for Backward Displacement.

Let us now consider the operations which may be advised and practised for the cure of backward displacements.

Abdominal Operations.—For maintaining the uterus in a forward position a variety of procedures may be adopted. The uterus may be stitched to the abdominal wall or the round ligaments folded within the abdomen or sutured to the abdominal wall or drawn into the wall or drawn backwards through a hole in the broad ligaments or folded back over the uterine cornua. The broad ligaments also may be folded in front of the uterus or behind the uterus. Different methods may be usefully employed according to the necessities of the situation; much use, however, can be made of the round ligaments to cover pedicles and to keep the uterus forwards where it has been necessary to remove some portion of the appendages. It is necessary to maintain the uterus in an anterior position after separating adhesions, etc., for unless this is done it will fall back again and the old symptoms will return.

It has often been asserted that these operations should be concluded by fixing the uterus to the abdominal wall. Such statements can only be made by those who have had little experience, for in the presence of inflammatory exudation it is often impossible to fix the uterus to the abdominal wall, and if it is done, the fixation will either soon stretch and give way or cause great suffering from the tension. It is here that the different methods of folding the round ligaments find a useful application.

For uncomplicated displacements with little or no descent, what is known as the "sling operation"—*i.e.*, pulling the round ligaments backwards through a hole in the broad ligament under the utero-ovarian ligament and fixing them to one another and to the back of the uterus. This operation should not be done in the presence of varicose veins in the broad ligament—for a number of instances of iliac thrombosis have been recorded following this operation. Moreover, it does not produce sufficient elevation of the uterus, should there be descent. In appropriate cases, however, I have found it a satisfactory procedure.

Another method I have employed for several years is fixation of the round ligaments to the lower part of the abdominal wall, just above the bladder, by means of buried silkworm gut sutures.

Technique.—This operation is done either by a transverse or a vertical incision.

In order that the transverse incision may be completely hidden by the vulvar hairs, I have employed the following modification. The skin is stretched in an upward direction by means of three pairs of Kocher forceps, one median and two lateral, applied to the transverse line on the skin of the abdominal wall, which is usually found about one inch above the symphysis pubis. The transverse incision is then made midway between the points of the forceps and the symphysis pubis, so that when the incision is sutured it lies across the Mons Veneris and becomes completely hidden by the growth of hair. The transverse incision need only extend as far as the position of the superficial epigastric vessels, which need not be divided.

After division of the skin and fat they are further separated from the aponeurosis in an upward direction until sufficient space is obtained to divide the aponeurosis in the middle line. The muscles are next separated (not cut) and the peritoneum exposed and opened. The uterus and appendages are examined, and if the latter are normal, the round ligament of one side is seized close to its uterine attachment with a pair of long Kocher forceps. A curved needle armed with silkworm gut is then passed through the aponeurosis, muscle and peritoneum, then under the round ligament close to the uterus and back again through peritoneum, muscle and aponeurosis. The needle is passed about one inch from the incision at its lower part close to the top of the bladder, which can be both seen and felt, and is a much better guide than any definite

measurement by inches from the symphysis pubis which seems customary in describing similar operations. The round ligament of the opposite side is treated in like manner, and when the silkworm gut is held taut on either side the uterus is suspended and anteverted. The peritoneum, muscles, and aponeurosis are united in the middle line, and then the silkworm gut is tied on each side. The tying must not be too tight and the threads must be so cut that they do not cause subsequent pricking.

If thought desirable, two or three catgut sutures uniting the round ligaments to the peritoneum may be inserted on either side to reinforce the silkworm gut.

This operation is simple, safe and satisfactory.

It leaves the uterus in good position, so that on examining some time after the operation it is difficult to tell what had been done. It does not interfere with subsequent pregnancy or labour, and it is an operation I frequently employ in the treatment of sterility. One of my patients, operated on after four years of sterile married life, has had two children born at the full time without difficulty, and her doctor informs me that her uterus is still in good position.

The possibility of intestinal obstruction from intestine being constricted under the attached ligaments might be urged against this operation. I am not aware that it has ever happened to any of my patients, and I should imagine that it is highly improbable that it ever will, if the operation be done in the manner suggested. I believe the dangers from obstruction are exaggerated, and when it does occur it is in all probability due to faulty *technique*.

Still striving after perfection, I tried another method.

A transverse incision is also used, and at its outer extremity I made a small incision into the aponeurosis, then separating the muscle fibres, a pair of Kocher forceps is used to push inwards the peritoneum. The latter is then snipped with scissors and the forceps pushed on through the hole and made to seize the round ligament towards its outer extremity. A loop of the ligament is then pulled through the track of the forceps and fixed by sutures on to the anterior surface of the aponeurosis.

The slit in the aponeurosis should not be too small lest the ligament be constricted, and for the same reason the sutures require to be carefully applied. The ligament is best fixed by three sutures; one at each side fixes it at the opening, and also unites the aponeurosis, and one at the extremity of the loop, or the loop may be pushed under the aponeurosis, a pair of forceps being used to separate the latter from the muscle, a catgut stitch closing the aperture.

The same procedure is then done on the other side, and the median and transverse incisions closed. Before closing the incision accurate hæmostasis should be obtained. Three silkworm gut sutures are passed, one mesial and two lateral; these should take a grip of the aponeurosis as well as the fat and skin. A buried suture of catgut is inserted to approximate the fat and aponeurosis and destroy dead spaces. The silkworm gut sutures are then tied over small pieces of indiarubber tubing after the skin edges have been approximated by Michel clips.

This operation leaves the uterus movable with no band or bands inside the abdomen around which the wandering intestine may inadvertently slip, and it does not interfere with subsequent pregnancy or labour.

I have employed this method for some years but have not put it on record until I was able to apply the best test of all—viz., the time test. Half-baked produce irritates the student of literature and disappoints the practitioner.

I do not intend to fight the question of priority, but the method was original as far as I was concerned. I always thought that burrowing between the layers of the abdominal wall, a principle employed by so many operators, was not an ideal method.

An objection which may be lodged against this operation is that the cervix may be tilted slightly forwards, but this could be remedied by shortening the utero-sacral ligaments, although I have not yet adopted this additional modification. Both these methods of round ligament fixation will be found suitable and should be selected according to the indications present.

The Alexander Adams operation of shortening the round ligament by opening the inguinal canal need only be mentioned, as it was a step towards the production of improved methods. It has the great disadvantage that the condition of the appendages cannot be inspected. It is impossible to tell by examination if the appendages are normal, however great the ability of the examiner may be. The great frequency of adnexal complications is one of the important lessons I have learned from my operative work, and not the least in importance is the fact that, although the uterus may be movable and replaceable in a position of anteversion, the tubal extremities may be sealed from the result of old inflammation, thus rendering the woman sterile.

The old "fear of the peritoneal cavity" having departed, there is no further need for extra-peritoneal operations.

VAGINAL OPERATIONS.

Vaginal Fixation.—In 1902 (*a*) I described a method of Vaginal Fixation which I had carried out successfully in a series of cases, the details of the *technique* being somewhat different from those originally suggested.

Briefly the fixation did not extend above the lower part of the uterine body, thus permitting the uterus to enlarge during pregnancy. This operation does not interfere with the subsequent course of pregnancy or labour, and is quite different from the complete vaginal fixation of the uterus which from its very inception must have been condemned by anyone possessing surgical *nous*.

I still believe vaginal fixation performed in the manner suggested to be a good operation, and as an adjunct to other vaginal operations, it may be usefully employed.

The indications for its use are, however, definitely limited, and it is not applicable where there is much descent complicating a backward displacement, or when the uterus is fixed.

Vaginal fixation of the round ligaments is another operation which is being employed, but of this I have no experience. It is obviously unsuitable where there is uterine descent.

The disadvantage of these operations is that you do not have the opportunity of inspecting the pelvic contents and of being enabled to deal with any complications which are present.

BACKWARD DISPLACEMENTS AFTER THE MENOPAUSE.

If the uterus be small and atrophic no treatment is necessary, for it will be found that under these circumstances the displacement does not cause any trouble.

If the uterus be still large, and the other indications point to the necessity for an abdominal operation, a thorough fixation of the uterus can be done, for here the question of future pregnancy

(*a*) *British Medical Journal.*

does not arise. Otherwise the same rules should guide the treatment as are applicable to women in the child-bearing period.

Backward Displacements in Association with Uterine and Ovarian Tumours.

A backward displacement of the uterus may result from the presence of a pelvic tumour pushing the uterus backwards.

When the tumour is removed the uterus may still fall backwards, and here one of the methods of plicating the round ligament will be found of service, or the round ligament of the corresponding side may be used to cover the pedicle (if an ovarian tumour has been removed) and at the same time help to keep the uterus forward.

A small fibroid embedded in the posterior or anterior uterine wall may easily be mistaken for an enlarged retroverted uterus. Such fibroids should be enucleated and the resulting cavity closed by suture. If desirable, this operation should be followed by another on the round ligaments.

Twelve months after myomectomy and uterine suspension by the round ligaments one of my patients gave birth to a healthy, full-time child without difficulty.

Backward Displacement of the Gravid Uterus.

When the gravid uterus is displaced backwards it may right itself, and even if accompanied by retention of urine, rest in bed and the regular use of the catheter to make sure the bladder is emptied, will frequently effect a cure. As all methods of replacement are apt to be followed by abortion, the greatest gentleness must be exercised should it become necessary to replace the uterus.

The uterus may, however, be fixed backwards by adhesions, and here it may be necessary to open the abdomen and free the adhesions. I have done this operation on two occasions.

One patient went to term and was successfully delivered; the other aborted four weeks after the operation.

If, however, fixed backward displacements are treated on the lines already indicated the occasion for this operation will not arise.

In conclusion, although I feel that the subject has not yet been settled, I trust I have said enough to urge the importance of a broader outlook in the treatment of backward displacement of the uterus.

A CASE OF ECTOPIA VESICÆ IN AN ADULT TREATED BY TRANSPLANTATION OF THE URETERS.*

By HENRY STOKES, M.D., F.R.C.S.I.,
Surgeon to the Meath Hospital, Dublin.

In presenting the following case it is not my intention to lay stress on the causes of ectopia vesicæ, or to give any account of the numerous operations which have been devised for the treatment. I simply refer any interested to the papers of Mr. Arthur Ball and Mr. Kennedy which are found in the *Transactions* of this Academy, and also to the paper by Buchanan in the *Surgery, Gynæcology, and Obstetrics* of the year 1909.

The patient was admitted to hospital on October 25th, 1915, æt. 26. but having the appearance of about 17, although healthy and well developed. The history, as related by his mother, was that since birth urine had been dribbling from the abdominal wall.

When born there had been difficulty in determining the sex; however, he was called a male, and brought up as such. At the age of ten a doctor in the country attempted, without success, to cure the condition by some type of flap operation. About this time Sir Kendal Franks saw the patient; what his views were on the case are not known. No further treatment was undertaken, and the patient lived a life of what must have been misery. Using 30 to 40 towels in the day, and at night lying in a pool of urine, he survived for 26 years.

On admission to hospital, I, for the first time, saw the patient in the presence of a class of students. The condition, as far as the bladder was concerned, was typical of ectopia vesicæ—that is to say, there was an area of chronically inflamed mucous membrane, measuring about 2½ inches by 2 inches, where the symphysis pubis should have been. There was no umbilicus, and, as there were numerous scars from the old operation, I could not be quite sure that one of these did not represent the umbilicus. The pubic bones were widely separated. On examining the external genital organs I was perplexed. For 26 years the patient had been considered a male; he was lying in a male ward. There was present a projection about three-quarters of an inch long below the area of mucous membrane; this projection was cleft. Further back, at each side, were two bulging masses; all these seemed to tally with a cleft rudimentary penis and a cleft scrotum. Yet there was something suspicious about the pubic hair.

I asked Mr. Ball to see the case with me next day, knowing of his previous gratifying success with a similar condition. Mr. Ball regarded the patient as a female, and well-developed female breasts coupled with a history of regular menstruation, left little doubt. Dr. Kidd kindly examined the case for me and was able to palpate a uterus and demonstrate a canal leading thereto.

The fact that the patient was a fully-developed female of twenty-six years naturally added difficulties to the operation. A search through literature only revealed one careful account of a somewhat similar case, in which anatomical peculiarities were shown of a very discouraging nature. A careful dissection of the region only served to frighten me on account of the large, thin-walled veins lying along the pelvis wall, while I could not demonstrate any visible supply to the lower ends of the ureters.

Operation.—On October 30th, 1915, with the assistance of Dr. Kidd and Mr. Ball, I isolated each ureter, with a button of mucous membrane attached, for the distance of about three inches. Then a transverse incision was made, and the uterus, which was normally developed, was removed, the peritoneum being sutured over Douglas' pouch. With one finger in the peritoneal cavity, a curved forceps was introduced into the rectum and with some difficulty pushed out through the abdominal wound. The track made was extraperitoneal. The rosettes of mucous membrane were, in succession, pulled into the rectum, where they hung freely. The abdominal wound was then closed after the patch of mucous membrane had been removed.

For three weeks the patient did unexpectedly well, only having passed water per rectum involuntarily on two or three occasions, and being able to keep herself quite dry both night and day. On the twenty-second day she lost control over her rectum, and passed urine mixed with blood and mucus frequently. For five days this continued, and was accompanied by fever with a temperature rising to 101°. On the twenty-seventh day I saw a dead gangrenous mass hanging out of the anus. Gentle pressure removed a dead rosette with one inch of ureter attached. From that time onwards urine began to trickle from the vagina. This condition persisted, the patient losing ground slowly.

* Read before the Section of Surgery of the Royal Academy of Medicine in Ireland.

Mr. Ball again saw her with me, and an attempt which proved futile was made to find out which ureter was leaking.

On December 18th I operated a second time, with a view to anastomosing the leaking ureter into the colon. I believed the right ureter to be at fault, and operated through an incision in the loin. The peritoneum was peeled forward, but no ureter could be found. The ovarian vessels were exposed as were the vena cava and aorta.

As it was essential to locate the ureter, I enlarged the incision downwards towards the fistula, and twice thought I had found the ureter. The first time I dissected out a very well developed round ligament, and on the second occasion I found the obliterated hypogastric artery leading to the anterior abdominal wall. These structures were both divided, and off the latter were seen small branches representing the superior and middle vesical arteries.

As I still could not define a ureter, I prolonged the incision upwards to expose the kidney. The kidney was enlarged, and had a very short pedicle which was bound down to the vena cava and aorta. From the hilum of the kidney a thick band ran down in the middle line across the bifurcation of the aorta, along the centre of the sacrum, and ended in the stump of the amputated uterus. I had seen this structure earlier in the operation, but as I could feel the pulsations of the aorta through it I did not believe it was the ureter. However, now I knew that it was.

As it was too dangerous to attempt to separate the inflamed and dilated ureter from the vena cava, and as even if I had done so I doubt if I could have transplanted it, I removed the kidney, leaving the ureter alone. As the peritoneum had been opened lower down, I passed my finger across the middle line and felt the left ureter in its normal situation. It was apparently normal to touch. The large wound was partly closed and drains left in. For some days the patient did well, but then symptoms of uræmia appeared, and the patient died on December 29th.

At the autopsy the left ureter with its rosette of bladder wall was found fixed in the rectum with no septic changes at the point of junction. The right ureter was found leading into the vagina. An abscess cavity containing about one ounce of pus lay at the bottom of Douglas' pouch. The left kidney showed pyelo-nephritis. Microscopical slides of the transplanted papilla showed that all the original bladder epithelium had disappeared, it having been replaced by scar tissue.

The anatomy of the internal organs was interesting, as apart from the disturbance due to separation of the pubic bones and to the absence of the bladder no abnormalities were found, unless we regard the internal displacement of the right ureter on to the surface of the vena cava as not being due to the dragging caused by the transplantation of the ureter at the first operation.

The separation of the anterior superior iliac spines was 10.125 c.m., the pubic crests 6.25 c.m. The depth of the pelvis from pubis to sacrum was 6.25 c.m.

The fatal outcome of the case was, I believe, due to infection of the transplanted part of the right ureter, causing an abscess to form outside the rectum and subsequent sloughing of the transplanted portion eventually leading on to ascending infection of both kidneys.

AMONG other gifts, ten extra motor ambulances for hospitals in India at a cost of £7,000 are being supplied by the St. John Ambulance Association.

EYE-FUNCTION AND LIGHT.

By P. W. COBB, M.D.,
Cleveland.

IT is readily to be seen that the problems relating to light and vision naturally divide themselves into two groups. They may be of interest on account of demonstrable anatomical lesions as a result of the incidence of radiation upon the tissues; or on account of disturbances set up originally in the sensory apparatus of the eye by adverse conditions of stimulation. It is the latter phase of the general question which is the subject of the present paper, and to make clear exactly what is meant it may be well to mention one or two facts of physiological optics (*a*).

One of these is the fact of adaptation. The least visible stimulus on going directly from a bright environment into a dark room has been shown to be from one thousand to several thousand times as great as the least visible after an hour's stay in the dark. The result of the sudden admission of much light into the eye in this dark-adapted condition is a blinding dazzle and pain, which rapidly subside; and in the course of perhaps twenty minutes the eye regains its former light-adapted state.

Contrast is also of interest here. It is a notable fact that in looking into the interior of a house from out-of-doors it is difficult or impossible to distinguish the objects within, while in the opposite case, looking out of a small window from the interior, such difficulty is not ordinarily met. It may, however, be experimentally demonstrated, as will be shown further on; and it is to be pointed out here that vision of a small bright field in relatively dark and extensive surroundings is accompanied by a vague discomfort, which for the want of a better word we will call *glare*, rather than by any material difficulty in the actual resolving of form—very much as in the case of a dark-adapted eye flooded with light. Indeed the two cases might without constraint be classed respectively as simultaneous and successive contrast.

A third point is the application to vision of Weber's law. This states (for all the senses) that two stimuli, to be just appreciably different, must be different in physical magnitude by an amount which for any given sense and mode of experimentation is a constant fraction of the absolute magnitude, irrespective of what the latter may be. That is to say, that the two stimuli in question must bear a constant ratio to each other. As above stated, the law is perhaps somewhat amplified over its original form. Its applicability to vision has been verified for a wide stimulus range, and a rough exemplification of it is in the fact that the objects in a room look the same whatever the absolute intensity of illumination may be. Any two objects reflect equal fractions of the light falling upon them, and hence always send light to the eye in the same ratio, and in this concrete case the law will also be found to hold for a wide range, breaking down most evidently at very low illuminations.

In view of the foregoing a few remarks may be made by way of orientation in the problem in question:

In order that they may be seen, objects or characters must present differences in brightness from that of the ground upon which they are to be seen, and these differences (contrasts) are quantitatively effective for seeing not *as* differences but rather as ratios. The eye must also be adapted to a certain range of brightness represented by the general brightness of the object and its ground. It is to be noted here that the retina is capable of local adaptation, shown by the fact of after-images,

(*a*) *Cleveland Medical Journal*, March, 1916.

as well as of the state of general adaptation mentioned above, and that as a consequence extreme contrasts in the field of vision will, as the eye wanders over the field, continually cause states of maladaptation locally in various parts of the retina, in addition to the unfavourable circumstance of a high grade of simultaneous contrast.

It is not very far, then, from the established facts of physiological optics to the conclusion that unfavourable lighting conditions are those which present extreme contrasts. In general, experience in the matter of light installation has pointed very definitely to this view.

How is the relative merit of any light-distribution to be appraised? The most obvious criterion is the size of the smallest detail correctly recognisable under the conditions to be investigated, the determination of visual acuity; a refined procedure similar to the ophthalmologist's practice of "taking the vision" of a patient. A second criterion is the brightness-difference threshold—the least difference in brightness of two juxtaposed areas of the visual field that can be recognised. These two criteria have been investigated under certain fairly well specified distributions of light incident upon the eye.

The first set of data of any degree of completeness that we have is that of Depène, who used numerals as the test objects and investigated the limit of vision with various illuminations upon them; the eye being under the influence of a second light, independently controllable, of various intensities and at various angles with the line of vision.

His conclusions can be stated briefly: a reduction in visual acuity is found to take place when light from a source at an angle with the line of vision is allowed to fall into the eye, and this reduction is greater—

(1) the smaller the illumination of the test object;

(2) the smaller the angle of incidence of the second (glaring) light;

(3) the greater the glare ("Blendung" is the word used, apparently meaning the intensity of the second light);

(4) The greater the retinal area illuminated by the second light.

However, he notes by way of exception to these that with illumination upon the test object sufficient to give vision a value of 1.25 or more an increase is found in place of a decrease, when the conditions as enumerated are moderate in degree.

And further, from this data it is to be inferred that unless the illumination upon the eye is greater than that upon the test object and the angle made by the disturbing light less than 10° with the visual line, no diminution in the power of vision takes place. Such an extreme condition is not conceivable in illuminating practice except as an obvious abomination.

The speaker has made similar investigation, replacing the disturbing source of light by a uniformly bright background for the test object large enough to fill almost the entire visual field; the test object and surroundings being independently controllable as to brightness. Expressed in a similar way the results agreed with the above. Unless the surroundings were brighter than the test object the result was as good as that obtained in viewing the test object in dark surroundings. (*a*) And to Depène's exception there was an approximate parallel, for surroundings of brightness equal to or less than that of the test object gave a slight increase over the result obtained with dark surroundings. This was not large, amounting on the average to not over 3 per cent.

The speaker has investigated a similar problem, where, instead of visual acuity, the discrimination of brightness-difference was used as a criterion. The least perceptible difference in brightness between the two halves of a small field is, according to Weber's law, a constant fraction of the brightness of the field. However, this fraction is found under certain circumstances to change with change in the brightness of the surroundings about as follows:—

With surroundings in excess of the field brightness the fraction increases promptly and progressively to a very high value, while in the opposite case, where the surroundings are relatively dark, there is also an increase, but this is very limited in extent. A definite and apparently limited optimal region was found at the point of equality.

The results of all this work may practically be summed up in a few words. On a field that is contrast-darkened visual discrimination is low. On a field seen in the midst of dark or relatively dark surroundings it is something short of optimal, while the optimum is to be found where field and surroundings are not far from equal in brightness.

We must remember that the above statement applies only to certain purely sensory criteria, and does not include the factor of ocular discomfort experienced at once or at length by the observer; nor does it apply to the question of eye-strain or the more general fag which may be the result of prolonged ocular effort under certain conditions. The typical lighting-conditions which have come under especial condemnation in these respects, as the result of the general experience of those who have given their attention to the practical problems of lighting, may profitably be compared with the experimental results described above to see how far the latter may be drawn into the explanation of the practical results.

One of these practical conditions is that of *local illumination*, where a light-source is placed rather close to the work of the individual and the general illumination of the room left to take care of itself. The result is that the general illumination is comparatively feeble, the work well illuminated, and the greater part of the worker's visual field relatively dark. We have seen that under corresponding experimental conditions the sensory capacity of the eye is somewhat augmented by a certain amount of light coming to the eye from the outlying parts of the visual field. The advantage, as measured by the sensory function of the eye, is not, however, comparable to the increased comfort and to the fact of the ultimate disappearance of complaints which result from an increase of the general illumination and the making of the local illumination auxiliary to this.

In contrast to this condition stand cases of general illumination in which excessively bright areas (in extreme cases naked lamp-filaments) appear in the worker's visual field. In such cases it is hardly possible, as we have already intimated, that the illumination upon the eye shall be in excess of that upon the work, as has been experimentally shown to be the condition of sensory depression. Yet when (as in some trades) the work consists of dark-coloured objects an equivalent condition may result. Otherwise the situation has been much alleviated by

(a) If one imagine a uniform sky, with sun absent, the illumination from it upon a patch of snow on a plain would make the snow exactly as bright as the sky—supposing the snow to reflect diffusely *all* the light that fell upon it. Again, imagine such a white surface placed in the sky. Obviously it would have an exactly equal illumination upon it to appear as bright as the sky. If this be the test object, the sky, its surroundings and the snow patch on the ground, the observer's eye, we will see that the conditions described in the above remark (surroundings brighter than the test object) mean that the eye is receiving a greater illumination than the test object.

such expedients as frosted lamps or diffusing glassware—which have the result of spreading the direct light from the sources out over a larger area of the retina, which, according to one of the experimental conclusions which we have mentioned, would tend to reduce the sensory capacity of the eye rather than to increase it.

We see, then, that the conditions which are practically considered disadvantageous to vision do not correspond to those in which a large sensory depression has been found by experiment. This makes it appear that an experimental criterion of the merits of any arrangement of light should not primarily involve a threshold or other primarily sensory determination. Indeed, we may say with reason that the simple inability of the eye to appreciate a stimulus may only be a cause of discomfort or fatigue when that inability is taken as a signal for greater or repeated efforts of the eye to adjust itself to the work in hand. And these efforts must be closely related to the motor functions of the eye, to the movements of the pupils, of accommodation, or to the activity of the extrinsic muscles in determining accurate fixation.

Again, there is very little actual work, clerical or industrial, which is carried out at anything like threshold values of stimulus. The threshold may be defined as the physical value of the stimulus, expressed in suitable terms, at which from being ineffective it becomes effective. But since that value is found to be more or less indefinite and fluctuating, it is, in experimental work, often taken as the value of the stimulus at which it is effective in fifty per cent. of a large number of cases—or a point inferably equivalent to this. The range (for vision of detail) between the largest stimulus which is practically never effective and the smallest practically always effective—the region from 0+ to 100—per cent. effectiveness—is represented by perhaps 10 per cent. difference in the dimensions of the stimulus object. If, however, the stimulus is about double its threshold size, a 10 per cent. difference has little or nothing to do with its effectiveness, for at the lesser size it is already 100 per cent. effective.

It would seem reasonable, from this, to suppose that conditions which so depress the sensory capacity of the eye that the threshold is raised 10 per cent. would not in any corresponding degree be difficult *on that account*, when the work it has to do involves stimuli far above the threshold as in the practical case. (*b*)

It is quite possible that any condition which ultimately induces undue fatigue must initially, in some way, show increased labour thrown upon the mechanism of adjustment of the eyes. A sufficiently reduced sensory function, if the eye is whipped up to meet it, might be adequate to explain fatigue. When such a modification of the sensory function is not demonstrable for the conditions of the work with a test-object comparable to the work itself, it can neither be used to explain eye-strain nor as an indication that such conditions will prove conducive to the same under prolonged exertion. (*c*) Rather should one look for evidence of some more direct interference with the motor processes of the eye—not explicable perhaps except as reflexes—but directly demonstrable in the examination of the motor processes of vision. Such disturbances should presumably be evident in the time-relations of these processes, and should appear at once under the conditions without waiting for the advent of fatigue.

(*b*) The conditions in mind here are the most general ones referring especially to clerical work. Work on dark or black fabrics may, for example, approach threshold values. In a printing office, a "shadowless" system of illuminaton may bring the typesetter's work nearer the threshold point; while such a system might be ideal in a situation where shadows are a drawback, as in a drafting room. All generalisations are dangerous. The character of the work is of the highest importance in the illumination problem, and this discussion restricts itself to the one kind except where expressly stated.

(*c*) It is not contended here that sensory depression as shown by an increased threshold may not be the result of fatigue, but rather that the investigation of the motor functions of the eye furnishes at once a promising field in which to look for an explanation of it and a possibility of a method for the physiological appraisal of lighting conditions.

PSYCHOANALYSIS.

BY AGNES SAVILL, M.D., M.R.C.P.
Physician, London Skin Hospital; Physician to Electrical Department, Medico-Psychological Clinic.

PSYCHOANALYSIS is in bad repute. Those who say they practise it are regarded not over kindly by their fellow physicians. The publications originating from Vienna and translated from the German tongue have excited a degree of repulsion which is apparently an almost universal experience at the first introduction to that school's literature on psychoanalysis. So unanimous a repugnance has in all probability a healthy cause, and points to a deep-rooted confidence in the innate righteousness of human nature which seems assailed by this recent school of psychologists. The common sense of the common man rises against the conclusions of Freud, which strip humanity of dignity and beauty. Freudians protest that they are misrepresented, that they employ the term "sexuality," which they read into every human activity, in a wide sense misunderstood by the uninitiated. We have heard Freud's disciples argue that pleasure in riding and motoring is sexual in origin, and still more advanced disciples state that every dream, even in normal individuals, when analysed deeply enough can be reduced to betray a repressed sexual desire of a primitive type. After reading their recorded cases and attentively listening to their discussions we remain hopelessly unable to grasp their esoteric meaning, or to understand why any other adjective with a personal emotional content, such as *theological,* should not equally well express the all-permeating significance of their *sexual.* Is it wonder then that the uninitiated are content to remain uninitiated, and continue to regard psychoanalysis as a dangerous obsession?

Our attention has been drawn to the fact that there is another school of practitioners of this new psychology, a school which, owing to the paucity of its translated publications, is scarcely known in England except by a few scholars who read German. Its home is in Zürich; its most prominent member is Dr. C. G. Jung. The English-speaking public can now make acquaintance with two volumes from the pen of this remarkable thinker, and will arise refreshed and strengthened to learn that if, as it would appear, psychoanalysis has come to stay, they can fearlessly permit their nearest and dearest, when in need of mental assistance, to relate their dreams and deeds to a practitioner of the Zürich school. "Analytical Psychology," (*a*) which has just appeared in England, contains papers written by Jung during the last fourteen years, and reveals the gradual development of his philosophy, which, with growing knowledge of mankind, has turned more and more from the Freudian interpretation of the human spirit. We understand that his "Philosophy of the Unconscious" is appearing in America, and we are certain that those who have studied "Analytical Psychology" will hasten to master the other volume when it is available in this country. We consider the subject so important at the present day that we make no apology for a short survey of Jung's position.

In the preface to "Analytical Psychology" Jung summarises what he frequent refers to in the volume—the divergent conclusions of the rival schools. Freud discovered the *technique* of psychoanalysis, and by his system all emotional content is reduced to sexuality. His method is reductive, seeks origins, is causal, and traces to the past. The method of the

(*a*) "Analytical Psychology." By C. G. Jung, M.D. Authorised translation, edited by Dr. Constance Long. Pp. 392; four illustrations. London: Baillière, Tindall and Cox. 1916. Price 12s. 6d. net.

Zürich school is constructive, and regards the potential and the future. Jung considers the two systems are characteristic of the two broad types of the human mind, which he terms extravert and introvert (p. 347). He quotes that eminently practical psychologist, William James, who, in "Pragmatism," describes human thinkers as divisible into the Tough and the Tender-Minded. The points of view of these types are mutually exclusive. The Tough-Minded prefer objective and material things; they are positivist and empiricist. The Tender-Minded are interested chiefly in things of the spirit and the inner life; they are idealist and monist. Jung regards the Freudian school as empiricist, according the psychological life a place only as the effect of sensation; whereas the Zürich school considers the environment of a man as less important than the dominating principles of his inner life.

Jung has not an easy style, and many pages demand frequent reading ere their meaning is fully grasped. His earliest paper contains an illuminating study of a case of multiple personality, written, we believe, before the appearance of Frederick Myers' epoch-making volumes on "Human Personality." Jung traces how the personalities corresponded to the patient's conscious wishes or repressed ideas, thus bringing the phenomena into line with the dreams of the neurotic. The physician will find much food for thought in the chapters on the Association Method, Dreams, Psychoanalysis, and the Content of the Psychoses, presented as these are by a remarkably original and deeply reflective student of life. Jung denies that the psychoanalyst forces interpretations of dreams, and gives advice to the patient. "In direct contrast (p. 207) to all previous methods, psychoanalysis endeavours to overcome the disorders of the neurotic psyche through the subconscious, not through the conscious self." The true psychoanalyst never persuades or suggests, but follows the patient's own working-out of his problems. Dreams provide the readiest route to the subconscious, but free association gives the clue when the subject declares he never dreams. Dreams follow while the course of analysis proceeds. Freud holds that the dream is a symbolic veil for the repressed desires in conflict with the ideals of personality. Jung condemns this as an inadequate or incomplete explanation; the dream is rather the "subliminal picture of the psychological condition of the individual in his waking state"; it "discloses to us the secrets which our unconscious self enviously hides from our consciousness, and it does so with astonishing completeness." Jung has been led to the conclusion that "the religious and philosophical forces —the so-called metaphysical needs of the human being —must receive positive consideration at the hands of the analyst." This independent opinion sounds almost like an echo of William James' "Will to Believe." The common sense of the common man, a generation ago derided by science, is being vindicated by the leading thinkers of the present day. Jung continues (p. 234): "By means of psychoanalysis the connection between the conscious and the libido in the unconscious is re-established. Considered from this standpoint, psychoanalysis no longer appears to be a mere reduction of the individual and his primitive sexual wishes, but it becomes clear that it is a highly moral task of immense educational value." The interesting vistas of thought opened up by this book remind the reader of Bergson. Jung admits (p. 351): "I realise that my views are parallel with those of Bergson, and that in my book the concept of the Libido which I have given is a concept parallel to that of (Bergson's) *élan vital*. My constructive method corresponds to Bergson's 'intuitive' method . . . When I first read Bergson, a year and a half ago, I discovered to my great pleasure everything which I had worked out practically, but expressed by him in consummate language and a wonderfully clear philosophic style."

Throughout history it has been observed that great thinkers, working about the same time with widely differing data, frequently arrive, quite independently, at the same conclusions. The similarity of the conclusions reached by three men of such diverse experiences as James of America, Bergson of France, and Jung of Switzerland, speaking respectively the English, the French, and the German language, is not a little astonishing, and of cheerful promise for the twentieth century. All maintain the power of the human soul, and testify to the validity of many of the uneducated beliefs which forty years ago appeared to conflict with the testimony of science. James describes the enormous reserve energy usually lying dormant in the subconscious, and drawn upon only in the great moments of life. He expresses his deliberate opinion in these words: "The further limits of our being plunge into an altogether other dimension of existence from the sensible and merely understandable world. We belong to it in a more intimate sense than we belong to the visible world . . . In communion with the Ideal, new force comes into the world . . . actually exerts an influence, raises our centre of personal energy and produces regenerative effects unattainable in other ways." And Bergson's oft-quoted paragraph will here bear repetition: "La vie entière, depuis l'impulsion qui la lança dans le monde, nous apparaît donc comme un flot qui monte, et que contrarie le mouvement descendant de la matière. Sur la plus grande partie de sa surface, à des hauteurs diverses, le courant est converti par la matière en un tourbillant sur place. Sur un seul point il passe librement, entraînant avec lui l'obstacle, qui alourdira sa marche mais ne l'arrêtera pas. En ce point est l'humanité."

In the subconscious of every individual, Jung believes, dwells or manifests this libido, élan vital, or creative impulse. In the neurotic there is a subconscious conflict of impulses, and by bringing these to the conscious level of the personality harmony, and consequently increase of power, is restored to the mind. Energy wasted in the subconscious conflict is set free to be used by the conscious will. With this conception of conflict it is evident that many of the so-called sensitive natures must live on the verge of developing a neurosis, if indeed they are not already neurotic; but with this definition there can be no shame in acknowledging the existence of the condition. Then comes the opportunity for the wise psychoanalyst. "The neurotic is ill . . . because he has not yet found a new form for his finest aspirations" (p. 277).

It must not be supposed from the above that Jung is blind to the sexual origin of many neuroses. On the contrary, in many cases he has found that analysis confirmed Freud's observation, and for certain subjects he holds broad views on sexual morality. He emphasises the far-reaching effects of sexuality in the life of both men and women; its power to raise to heaven or drag to the depths; according to the manner in which it is manifested, to elevate and harmonise, or to degrade and dissociate the personality. The place Jung attributes to sexuality is, however, very different from that of the Viennese school. It is not unfair to represent the two views thus: "Matter," said the scientist of forty years ago, "is but crass matter; man develops from matter, and therefore he can only be matter. All his qualities can be explained by physical laws; the lowest explains the highest." The modern scientist says: "If man comes from matter, then matter cannot be crass matter, because it holds such a potentiality. The end explains the beginning; seek the meaning of the lowest in its highest development." The Viennese school seeks the meaning of man in his primitive sexual roots; the Zürich school looks at the flowering branches of man's social activities and aspirations.

If some knowledge of philosophy is an asset in the equipment of the average physician, it is an essential study for the man who deals with the neurotic and the mentally disordered. Only a trained psychoanalyst can criticise the details of Jung's reasonings, but the common man's verdict proving usually on the side of truth, we unhesitatingly state our confidence in the ultimate decision of science in favour of the Zürich school. Many details will doubtless be altered with wider experience of human qualities and powers, but the main principles will probably stand the test of time. We confess still to hold some doubting scruples as to the future of this new science, so potent for evil and for good. Its members claim that they

do not influence the patient; they merely assist him to express what lies in his subconscious. We point to the different interpretations given by these two schools, and ask how is it possible that these are not employed by the operator, consciously or unconsciously, so as to stamp for life the character of an impressionable analysed individual. We feel that we should exert the utmost care in the present stage of development of this young science in the selection of the operator suitable to the patient whom we advise to undergo the analysis. No protest that influence is not consciously used will convince us that the choice of analyst is not more important than the choice of surgeon. The clumsy knife may maim or slay the body; injury to the soul is of infinitely greater moment.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

IS THERE NEED FOR ADDITIONAL MEDICAL TRAINING IN RELATON TO VENEREAL DISEASES.

To the Editor of THE MEDICAL PRESS AND CIRCULAR

SIR,—I am disappointed. I had looked to you to protest against the libel of the Commission and of those who issued the circular about venereal diseases. In my student days—now unfortunately very long ago—the standing gibe was that all students knew at any rate everything about one disease—gonorrhœa in the male—or, as "Sinapis" puts it, assimilated the teaching with avidity on this subject. He now implies that those ideas were all wrong and the commission right, and that men qualified only ten years ago practically know nothing about the gravity of the disease. I protest against this assumption. Are the present teachers only recently qualified men? If not, they must be classed by "Sinapis" as antiquated. How did they get their knowledge? But perhaps he excepts teachers and specialists—a favoured class who have miraculously gained some special knowledge, even though they were qualified over ten years ago.

Bacteriology may have explained treatment, but I assert has not advanced it in gonorrhœa. The remote effects of gonorrhœa in the female are no more preventable now than they were half a century ago, although surgery may remove the effects. I have looked up the treatment of gonorrhœa in the male in old classics and in the present most-read text-books, and find practically no difference in the recommendations, except for the introduction of a few new drugs, such as hexamine, and the substitution of protargol for argent nit. Vaccines are of very doubtful efficacy. The internal treatment is as much in dispute now as it was in the time of Graves, Tanner, or Warburton Begbie. This proves research, not obsoleteness. I do not, from consideration of your space, enter into the subject of syphilis, but I think there is not much new to be learned even about it as to treatment since the time of Donovan, Collis, and Hutchinson, but what is new, *e.g.*, the Wassermann test, spirochætes, 606, and grey oil have been assimilated. Depreciation of our profession, if justifiable, might, I think, be left to those outside the profession; but if not justifiable, should be resented by our journals. In this case, I contend the criticisms are unjustifiable.

I am, Sir, yours truly,
JAMES HAMILTON, M.D.

Chelsea, S.W.
May 12th, 1916.

THE WANT OF COHESION.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Noticing in your current issue that you remonstrate against the lack of cohesion amongst the profession I would bring the following fact to your attention. As the possessor of a recent testimonial from the Serbian Government for work done in 1915, I applied to the Wounded Allies Committee, Sardinia House, for work. I was invited to fill up a form as to qualifications, etc., but towards the end it ran thus:—Does the applicant desire to be paid or unpaid?

When the Committee came to this portion of the form, and reading that I had expressed myself as desirous of some remuneration, their visages changed most pronouncedly.

Although the profession does much work for nothing I consider it to be better policy to take the remuneration in cases of this kind, and then return it either directly or indirectly as I have done with some of the money I received from the Serbian Government (which still owes me £10 by the bye). I informed the Committee that I objected to this undercutting, and there the matter ended.

I am, Sir, yours truly,
OVER AGE.

May 12th, 1916.

CONSCIENCE AND OTHER MATTERS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Because I have asked that certain offenders (if so they must be regarded) shall receive the trial the Law ordains for them, Dr. Claye Shaw again attempts to fasten on me his charge of "sympathy" with them—and then talks of attorney-damning!

Most of the quotations he speaks of do not even refer to conscientious objectors, but to conscience. The issue is plain enough: I have asked for impartiality from the Law, which, as a saying has it, supposes the judge to be on the side of the accused; and I have contended that Conscience, in its usually accepted sense of the word, is a super-mental entity. I would have said "in its popular sense," but that Dr. Shaw appears to regard this adjective as synonymous with "inaccurate." Whether I have made good my case your readers, if sufficiently interested in my previous letters, must judge from them.

Dr. Shaw's answer to the plea for impartiality is simplicity itself: The Law has seen fit to change its mind. The same day which brought this answer brought also an example of the consequences of the change. I subjoin an extract from a press report of proceedings in the House of Commons on the 9th inst. The statements of Mr. Rowntree appear to have been unchallenged.

"At question time an important aspect of the compulsion question was raised. Mr. Rowntree, the Liberal member for York City, asked the Prime Minister whether he had yet received the answer to his inquiries into the case of Rendal Wyatt, a graduate of Cambridge University, who, along with other conscientious objectors to military service, was being punished by daily confinement for a period of time in a dark cell and in irons and fed upon a diet of bread and water in the military prison at Harwich Circular Redoubt. Was it true that whilst these inquiries were pending Wyatt, along with 16 other conscientious objectors, had been sent to France? Could the Prime Minister state what duties these untrained men who felt they could not undertake military service would be expected to undertake there?

"Mr. Asquith replied: I am inquiring into this case, but I have not yet been able to ascertain whether Rendal Wyatt has been sent to France. If

he has he will presumably be engaged on the duties mentioned by the Under-Secretary for War in an answer given to the hon. member for Blackburn on April 19th.

"Mr. Rowntree strongly urged that such men should be removed to civilian prisons, and Mr. Snowden asked whether, in France, the death penalty would not be inflicted on them."

At this point a reflection occurs to one. The Law may "see fit to change its mind" concerning other obnoxious persons than conscientious objectors, and the Periphery of this and other weeks' issues throws a lurid light on the possibility of medical men being affected by this attractive versatility. At present the mind looks like changing on Insurance Act matters and on Notification Fees. Does Dr. Shaw applaud these changes as well? If so, our foes are indeed of our own household.

Yes, there is a false coinage of words as well as the genuine currency. And Dr. Shaw's use of the word "knowledge" in commenting on Mr. Arnold Bennett's prophecy lacks the ring of true metal. Whence came this "knowledge" to the conscience-stricken German, and how was it "put into" him? Not through his Kaiser, not through his officers and teachers, not through the (to him) evil consequences following his devilries. For these crimes happened also early in the war when he was sweeping onward to the gates of Paris. Even then there were instances of soldiers who were overcome with shame for the work they did. What was it which made them ashamed in spite of training, environment, and orders? What, as I have asked in my last letter, conditioned their soul's response to a new crisis in its moral life? Had these cases happened in this year, when Germans are beginning to suspect that "Frightfulness does not pay," something might be said for Dr. Shaw's view.

Doubtless many mental processes may be understood in terms of mathematics. But what if the experience of men for thousands of years, that conscience is a supermental entity, be true? Attention and memory may be after some fashion weighed and measured, but this strange force which tells a man in the hour of guilty victory that his triumph *is* a guilty one—what "graph" will estimate this? From the quiver of shafts, barbed and other, which your other correspondent, "A Student of Psychology," obligingly holds out, I select Lavater's; "Conscience is wiser than science."

Dr. Shaw thinks that an innate knowledge of right and wrong, which, of course, carries with it the power to choose between them, will sap our striving to do what is right. The men who have borne the strongest witness to such a power have not been marked by the cessation of such a striving. As he has mentioned the New Testament, I cite again the case of St. Paul; "and herein do I exercise myself, to have always a conscience void of offence toward God, and toward man." None will question the sense in which Paul used the word "conscience" in this avowal, and the striving is evident enough. (By the way, he seems to have got a hearing at least before his Tribunal, although law processes then as now were not attended with feverish activity.)

The case has been argued, and must now go to the jury. They will, I hope, accord me more consideration than I have received from Dr. Claye Shaw.

I am, Sir, yours truly,
L. Gwillim Davies, M.D.

Histon, Cambridge.
May 13th.

P.S.—I find from the Press of the 11th inst. that the case of the Quaker schoolmaster, Mr. Wyatt, is much worse than shown by the cutting, and that many other cases, unchallenged in the House, have occurred of barbarities inflicted on such men as he. No Prussian barrack-square can have witnessed much worse. I enclose the cutting, but fear it is too long to insert. But let medical men study these things, I say, and consider what may befall those concerning whom the Law changes its mind: there are more ways of killing a dog than by hanging him.

CONSCIENTIOUS OBJECTORS.

To the Editor of The Medical Press and Circular.

Sir,—Your readers should be very grateful to that eminent psychologist, Dr. Claye Shaw, for exposing the sophistries of Dr. L. Gwillim Davies. Error lurks in generalities. The word conscience is a catch-word—a mere phrase used as an argument for or against anything; an attempt on the part of the disputant to impose his own individual sentiment on other people, without giving them a reason for it. Bentham in his *Introduction to the principles of morals*, says: "It is curious enough to observe the variety of inventions men have hit upon, and the variety of phrases they have brought forward, in order to conceal from the world, and, if possible, from themselves, this very general and therefore very pardonable self-sufficiency. One man says he has a thing made on purpose to tell him what is right and what is wrong; and that is called a 'moral sense': and then he goes to work at his ease, and says, such a thing is right, and such a thing is wrong. Why? 'Because my moral sense tells me it is.'"

Being a doctor, and therefore a learned man (*doctus*=learned), Dr. Davies ought to know that the mind at birth is a *tabula rasa* (the white page of John Locke), and accordingly that there is no such thing as innate ideas, only innate capacities. Hence, we do not bring with us into the world any idea of right and wrong; it is only experience which endows us with such concepts. Some people interpret these terms according to their own convenience. For example, certain financiers consider people who part with their money readily as mugs. The lion's "good" is what is good for him; it is the antelope's notion of "wrong." Has Dr. Davies ever read Hartley, Locke, or Mill? or even Hume or Helvetius?

I am, Sir, yours truly,
W. Windybank Carter
(Father of three soldier sons).

Watford, Herts.

Mr. Stephen Elgar, of Ramsgate, left £1,000 to the Ramsgate General Hospital.

The Skinners' Company have made a grant of £21 to Queen Charlotte's Lying-in Hospital, Marylebone Road.

Excluding Admiralty surgeons and agents, 1,118 qualified medical men are now employed in connection with the Navy.

Mrs. Fanny Sayce, of New Barnet, Herts, left £300 to the Victoria Cottage Hospital, Barnet, and £200 to Guy's Hospital.

Sir Andrew Richard Scoble, of Wimbledon, left £5,000 each to King Edward's Hospital Fund and the Convalescent Home, Orphanage, and other charitable works carried on by the Sisterhood of St. John the Baptist at Clewer.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Section of Obstetrics and Gynæcology.

Annual Meeting held Thursday, May 4th, 1916.

Dr. M. Handfield-Jones in the Chair.

The officers and council for 1916-1917 were elected.

L. Carnac Rivett, F.R.C.S., was elected a member of the Section.

The President made a few sympathetic remarks on the loss that the Section had sustained by the death of Dr. R. Drummond Maxwell.

Dr. Herbert Spencer read a short communication on a fourth case of

PRIMARY CANCER OF THE FALLOPIAN TUBE

(his three earlier cases had been published in the *Journal of Obstetrics and Gynæcology of the British Empire*, 1910).

The tumour was removed, together with the uterus (which contained an adeno-myoma and a small myoma) and a simple ovarian cyst with which the ostium of the tube communicated (tubo-ovarian cyst). The cancer occurred in the ampulla of the tube, to which it was confined. The growth was a carcinoma resembling in many places a sarcoma. Extensive keratinisation was present. Sections were shown demonstrating the origin of the cancer from the epithelium of the tubal plicæ. The growth recurred in the pelvic colon, a piece of which was excised and an end-to-end anastomosis made. The growth again recurred and was not influenced by X-ray treatment.

The sequel of events in developing cancer in this case appeared to be (1) salpingitis with simple invasion of the muscular wall by tubal glands; (2) papilloma; (3) malignant invasion of the wall by glands, the epithelium of the glands and of the papilloma becoming proliferated to form cancer.

Dr. H. Russell Andrews showed a specimen of "bilateral carcinoma of Fallopian tube." The patient was aged 55, married twice, childless. The menopause occurred at 49. In December, 1914, she began to have a discharge of blood, and later the discharge "turned to pure water." She said that she had lost as much as a quart a day. She was admitted to the London Hospital in March, 1916. The profuse watery discharge was thought to suggest the presence of carcinoma of a Fallopian tube. The abdomen was opened, and both tubes were found to be greatly dilated, the left forming a mass 6 inches by 2½, the right 4 inches by 2. The uterus was atrophic, and showed nothing abnormal. The cavity of the right tube was almost filled by papillary growth; the left contained a good deal of similar growth, but was not so tightly filled.

Dr. Andrews considered that the growth was a papillary carcinoma, but thought that there might be some discussion as to whether it should not be called a papilloma, and suggested that the specimen should be referred to the Pathological Committee.

Lady Barrett showed a specimen of "primary squamous-celled carcinoma" arising in a tuberculous Fallopian tube. The patient, æt. 46, married nine years, sterile, had complained of pain in the right iliac fossa for ten years. There was a hard well-defined tumour in the right side of the lower abdomen. On vaginal examination, Douglas' pouch and both lateral fornices were filled up by the swelling. The uterus and both tubes and ovaries were removed. The right tube showed very extensive tuberculous disease. The left tube was lined by tuberculous granulation tissue, and towards the outer end there was squamous-celled carcinoma with keratinisation and a few cell nests. There was no carcinoma in the uterus, and numerous sections of the ovaries failed to show the presence of "dermoid" tissue.

Dr. Cuthbert Lockyer showed a specimen "Precancerous changes seen in the displaced epithelium of nodular salpingitis."

Some remarks sent by Mr. Alban Doran were read by the Senior Secretary:—

Mr. Alban Doran, who has read the records of later cases of cancer of the Fallopian tube with much interest, has come to the conclusion that primary cancer is the rule—a statement he would not have dared to make in 1888, when he described the first case under his personal observation. The malignancy of tubal cancer is of a very high degree, even after the most modern and radical operations, yet after-histories rarely include any suggestion of a primary seat other than the tube. How comes it, if according to some authorities tubal cancer is always secondary, that the primary disease happens to be always latent when a tube is amputated for carcinoma? Do we often meet with such a pathological phenomenon in the case of the breast or tongue? The Wells-Bickersteth case of papilloma teaches us that a new growth of a type which later experience has shown to be very liable to malignant degeneration may be absolutely confined to the Fallopian tube; when such degeneration occurs the tube must of necessity be the primary seat of carcinoma.

Dr. Heywood Smith discussed Dr. Spencer's communication, saying that he should like to ask Dr. Spencer with regard to the first case he narrated, whether, if the oviducts had been opened at once and had been found malignant, and if, therefore, the other one had been removed, in his opinion it would have given the woman a better chance, or was it another case where a woman had neglected to realise the importance of abdominal symptoms.

Dr. F. J. McCann discussed Dr. Andrews' specimen.

Drs. Spencer and Andrews replied.

Dr. Henry Briggs read a paper on

UNILATERAL SOLID PRIMARY ADENOMA OF THE OVARY.

The recognition of a benign solid glandular growth—an adenoma—as a rare primary tumour of the ovary was the main purpose of this short communication.

Allusion was made to the fact that the numerical preponderance of fibroma over sarcoma had been long and well established, whilst amongst solid primary glandular growths any corresponding statement concerning adenoma and carcinoma was still wanting; for this omission rarity and uncertainty were responsible.

In support of the paper, three cases of unilateral large solid adenoma of the ovary were described.

Case I.—S. S., æt. 54, 8 by 4 by 4½ in., adhesions, ascites, 1 gall.

Case II.—A. L., æt. 38, 7 by 5 by 5½ in., adhesions, no ascites.

Case III.—Mrs. McG., æt. 62, 3½ by 3½ by 3½ in., no adhesions, no ascites.

An almost borderland case of unilateral solid cancer of the ovary was included.

Case IV.—A. G., æt. 36, 10 by 7 by 6½ in., universal adhesions, no ascites. Estimated freedom from recurrence, 10 to 12½ years—death from cancer 15 years after ovariotomy.

The inclusion of this case (1) supplements the report on February 4th, 1915, by Dr. Herbert Spencer, before the Obstetrical and Gynæcological

Section, on a ruptured unilateral solid cancer, 6 by 3½ inches, of the ovary, ovariotomy, subsequent pregnancies and good health after seven years; and (2) associates with it an even longer after-history of freedom from recurrence.

In this case an apparent surgical triumph over a large, adherent, cancerous tumour is singular enough to suggest, if not to establish, the tumour's innocence and an entirely new and independent cancerous growth during the last four of the fifteen years of the patient's life subsequent to the ovariotomy.

To his colleagues in pathology, Professors Ernest Glynn and Beattie, the reader of the paper expressed his indebtedness for a scrutiny of the histological details; in two, Cases I. and II., the alveoli were lined by short columnar or cubical cells in a single layer; in one, Case III., an intermediate arrangement, *i.e.*, the alveoli were not packed, they were lined, not with one but several layers of short cylindrical cells, curtailing and usually not obliterating the lumen of each alveolus, and in one of the growths, Case IV., the alveoli were fully packed with similar epithelial cells.

Dr. Herbert Spencer discussed the paper. He thought there was need for further careful study of solid ovarian growths with glandular contents. His own case, alluded to by Dr. Briggs, was certainly not an adenoma; it was a soft growth, and microscopically was a medullary carcinoma, exactly resembling one of Dr. Briggs' cases which recurred. Although over 12 years elapsed before recurrence occurred in Dr. Briggs' case, that did not prove that it was not a true recurrence, which had been known to occur after more than twenty years in cancer of the uterus. In the light of Dr. Briggs' case, his own patient, who had since had children and remained well for some years, would be watched with some anxiety. The most interesting cases of solid "adenoma" were those hard tumours containing masses of epithelial cells diffused throughout the fibrous stroma, of which he had removed one example, and several specimens had been exhibited before the Section. These hard, slow-growing tumours, he had no doubt, were simple fibro-adenomata, although the opinion that they were carcinomatous had been given by several members of the Section when Dr. Giles' specimen was exhibited.

In reply, Dr. Briggs said that of the clinical histological puzzles none could be more difficult than adenoma *v.* carcinoma.

Mr. J. D. Malcolm related a second case of "pneumoperitoneum" probably induced by the bacillus aerogenes capsulatus. Both Fallopian tubes, the left ovary and the vermiform appendix were removed from a woman, æt. 38, on account of inflammatory disease. Three days later the abdomen began to distend, and continued to do so until it was blown up like a tense balloon. On re-opening the peritoneal cavity several days after the first operation a large quantity of odourless gas was set free and the distension immediately disappeared. The patient made a good recovery. The case recorded in the Surgical Section (*Pro. Royal. Soc. Med.*, Vol. III., Surgical Section, pp. 13-24), in which a similar condition followed removal of the cancerous rectum, was referred to, that patient being about and well six years after this operation. In both cases, arguing by a process of exclusion, it was concluded that a micro-organism, probably the bacillus aerogenes capsulatus, was the cause of the development of gas. The innocuous character of this bacillus under certain circumstances was pointed out. The pneumo-peritoneum in these two cases was not diagnosed until the peritoneal cavity was reopened with a view to the relief of a supposed intestinal obstruction by draining the intestine after the fashion described in the 8th Vol. of the Society's Proceedings (*Pro. Royal So. Med.*, Vol. VIII., Obst. and Gyn. Section, pp. 16-24). It was suggested that possibly some cases of pneumo-peritoneum had been overlooked by refraining from operative treatment for distension of the abdomen by gas.

Drs. F. J. McCann, Cuthbert Lockyer, C. Hubert Roberts and H. Russell Andrews discussed the paper, and Mr. Malcolm replied.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

The Annual Congress.

The Annual Congress of this Society was held on May the 4th, 5th and 6th, under the presidency of Mr. Walter H. Jessop, F.R.C.S.

The discussions took place at the headquarters of the Royal Society of Medicine, and the clinical meeting at the Central London Ophthalmic Hospital.

PRESIDENTIAL ADDRESS.

The President, in the course of his opening address, referred with pride to the fact that the Society was now presenting its thirty-sixth consecutive annual volume of transactions. The Bowman Library was the finest and most complete ophthalmological library in the world, and he pleaded for the co-operation of members in keeping it well supplied with literature of interest to the speciality. He also asked members to notify any changes which had occurred in cases discussed, so that their sequelæ might be known. The Society was this year the poorer by the death of two brilliant workers: Mr. George Coats, of London, and Professor Straub, of Amsterdam. A special tribute was due to the first-named of these for his great help to the Society, especially in its troublous time three years ago. Mr. Jessop devoted the main part of his address to the subject of some ophthalmic lessons of the war. Thanks to the efforts of Colonel Lister and others, the treatment of cases of eye injury in the war had been good. He, the speaker, had, as yet, found no case of sympathetic ophthalmitis, which happy fact was attributable to the precaution of removing every portion of a smashed or broken eye. In the war of 1870, sympathetic eye trouble was reported in 55.6 per cent. of the cases of severe injury to that organ or the orbit. The war had taught ophthalmic surgeons much on the subject of papillœdema, a question which had been patiently worked at by Mr. Leslie Paton and Dr. Gordon Holmes. He proceeded to refer to trench nephritis and the eye changes seen in association with that disease. He regarded it as a toxic condition, and referred to the occurrence of œdema of the retina, ocular hæmorrhages, and the formation of white plaques. In the worst instances the blood pressure was high, but it varied much in different cases. In uttering a word of encouragement to younger ophthalmologists in the accurate observation of cases, he laid stress on the examination being conducted in daylight wherever possible.

On the motion of Sir Anderson Critchett, the president was cordially thanked for his address.

Mr. J. Herbert Fisher read a paper on

"Leber's disease (hereditary optic atrophy): a suggestion as to its cause."

He suggested that the causal agent might be a disturbance of the pituitary body, of temporary

duration, and moderate in degree, implicating the visual pathway. If his view proved to be correct, he thought organo-therapy might be expected to do good. During pregnancy the pituitary gland might be enlarged to two or three times the normal, and a milky secretion could often be squeezed out of it. There was known to be a close relationship between the pituitary and the sexual glands. Moreover, the pituitary and the optic chiasma were in such close contiguity that any small swelling of the former would extend to and make itself felt in the latter. He exhibited a skiagram showing a honeycomb-like shadow in the situation of the pituitary.

The paper was discussed by Sir GEORGE BERRY, Dr. G. MACKAY, Dr. S. A. KINNEAR WILSON, Mr. STACK, Mr. STEPHEN MAYOU, and Dr. C. O. HAWTHORNE.

Mr. FOSTER MOORE contributed a paper on

"THE RETINAL CIRCULATION IN ARTERIO-SCLEROSIS."

He agreed with Priestley Smith that a high pressure in accessible arteries in elderly men did not necessarily mean high pressure in the ciliary capillaries. A sudden obstruction of circulation due to thrombosis in an artery might lead to relative starvation of tissues, and the patient might awake to find himself blind. Sometimes there was an equally rapid recovery of vision. It was not necessary to invoke spasm of the retinal artery as a cause.

In the discussion which ensued, the PRESIDENT, Mr. BICKERTON (Liverpool), Mr. BLAIR, Lieut.-Col. ELLIOT, Dr. C. O. HAWTHORNE and Mr. ELMORE BREWERTON took part: and Mr. FOSTER MOORE replied.

Dr. S. A. KINNEAR WILSON read a paper on

"DYSMETROPSIA,"

meaning thereby a defect in the capacity to appreciate the size and distance of objects. The cases of this peculiar condition he divided into (*a*) those in which the lesion was presumably peripheral, (*b*) those in which it was probably central, (*c*) psychical cases. In a case of the latter the young woman, who was the subject of hysteria, always saw the right half of objects much larger than the left; and if two shillings were placed side by side, she considered that the one on the right-hand side was a half-crown. In a case of occipito-parietal tumour, the objects seemed so near that they appeared to be practically touching the observer's face. Dr. Wilson considered that in judging of distances and sizes of objects we learn more from the retina than from so-called kinæsthetic impressions.

The paper was spoken to by Sir GEORGE BERRY, Dr. CRAIG, Mr. CYRIL WALKER, Dr. G. MACKAY, and Mr. GREY CLEGG: Dr. WILSON replied.

Mr. M. HINE recorded some observations with the Schiötz tomometer, as a result of which he was of opinion that eserine produced no injury, although many of the cases observed were in children: and that it definitely reduced intraocular tension, a view shared by a number of workers who had recorded their observations.

Mr. E. TREACHER COLLINS read a paper on

"CONTUSION HYPOTONY."

He pointed out that diminution of tension after contusion of the eye, apart from any perforation of the globe, was not infrequent. In most cases normal tension was restored in a few days: in others not for several weeks, and in some it remained so long as to be likely to be permanent. The causes he discussed under the following heads:—

(1) Diminished secretion: divisible into (*a*) from nerve inhibition, (*b*) from vascular disturbance, (*c*) from epithelial damage.

(2) Increased excretion, namely (*a*) through normal channels, (*b*) through newly-formed channels. After quoting several illustrative cases he submitted the following conclusions: (1) Hypotony following contusion of the eyeball may be due to different causes, more than one of which may be present at the same time. (2) When of short duration it is probably due to an increased rate of excretion of the intraocular fluid through the expanded normal channels of exit: or, possibly, to some arrêst of secretion from paresis of the vaso-constrictor nerves. (3) When of long duration it may be due to (*a*) the formation of new channels of exit for the intraocular fluid from the anterior chamber from either an internal scleral rupture, or rupture of the pectinate ligament, (*b*) the cutting off of blood supply to the ciliary body from rupture of the anterior ciliary arteries, or (*c*) possibly the detachment of the pars ciliaris retinæ.

(4) If accompanied by extensive hæmorrhage into the anterior chamber, either the canal of Schlemm has been opened up by an internal scleral puncture, or the anterior ciliary arteries have been torn across from cyclodialysis.

(5) If, when the blood has been cleared away, a portion of the iris has disappeared from view, as though an iridectomy had been done, then there has been cyclodialysis with rupture of the anterior ciliary arteries.

(6) If, in the course of time, a translucent area appears just outside the sclero-corneal margin, like that seen in cystoid cicatrix, then there has been an incomplete internal rupture.

(7) If the anterior chamber, without extensive hæmorrhage into it, becomes markedly deepened in the whole or part of its circumference, there has probably been a rupture of the ligamentum pectinatum, limited to the pillars of the iris, and of the ciliary muscle, prolonging the angle of the anterior chamber outwards.

(8) If the lens is dislocated laterally and the retina detached, the vitreous humour has probably come forwards into the circumlental space, and may have dragged the pars ciliaris retinæ away from the pigment epithelium.

Lieut.-Col. ELLIOT and Mr. CRIDLAND discussed the two papers, and the authors replied.

A discussion on

"FOREIGN BODIES IN THE EYE AND ORBIT"

was introduced by Mr. A. L. WHITEHEAD (Leeds) and Mr. J. HERBERT PARSONS (London). Mr. Whitehead referred to the frequency with which the eyeball was penetrated by foreign substances in industrial centres. Sometimes the particle passed completely through the globe, and the war had demonstrated the extraordinary penetrating power of metals when propelled by high explosives. He enumerated the various forms of eye injury, and said that the prognosis and treatment of an eye containing a foreign body must depend upon a variety of factors, such as the introduction of septic organisms with the foreign body, the size of the substance, the site and depth of penetration, the nature of the substance. Copper, unless embedded in the lens, always set up localised suppuration, with necrosis of tissue, and, if in the vitreous, phthisis bulbi. He discussed X-ray localisation, and the extraction of steel and iron by the electro-magnet. If steel were in the vitreous, he made a conjunctival flap, punctured the sclerotic behind the ciliary region, and inserted the point of the giant magnet, keeping the current on during withdrawal. In his hospital, the onset of sympathetic irido-cyclitis secondary to retention of a foreign body in the exciting eye was not common. An injured eye without useful vision

should be enucleated if there was even a suspicion of the presence in it of a foreign body. If a foreign substance were not giving pain or discomfort, it should be left alone.

Mr. Herbert Parsons discussed the

ANATOMICAL RELATIONS OF THE EYEBALL TO THE ORBIT,

and urged a more accurate study of the relations of the living eye to the bones, which could be done by the insertion of slips of lead foil in the cocainised conjunctival sac. The eye was least protected against missiles coming from a direction downwards and outwards. Despite the heat generated in a high-velocity missile, the particles entering the eye were not always sterile. The diagnosis, pathological condition, treatment and prognosis all depended profoundly on the nature of the foreign body. When the body could not be seen in the eye, skiagraphy must be employed, but this had its severe limitations. He regarded accurate localisation as most important. If this were not within 1 m.m. it might mean the needless sacrifice of an eye. Only rarely did a copper particle become encapsulated with restoration of useful vision. He discussed at some length the production of siderosis bulbi. Glass and porcelain might cause remarkably little reaction in the eye, but eventually the eye usually became disorganised following irido-cyclitis. The lens substance and the vitreous formed excellent culture media. The ultimate results of extraction of intraocular foreign bodies by the electro-magnet were of profound importance, and had not yet received their due attention. He concluded by alluding to the different operative measures according to the class of case, and the prognosis in them.

The debate was carried on by the President, Mr. Hill Griffith, Dr. Craig, Mr. Treacher Collins, Mr. Gray Clegg, Dr. Finzi, Capt. A. W. Ormond, Mr. Arnold Lawson, Mr. Mayou, Mr. Hamilton, Mr. Cridland, Dr. Hern, Mr. Rowan, and Mr. G. Mackay. The authors replied.

A debate on the

TREATMENT OF THE SYPHILITIC EYE AFFECTIONS BY THE NEWER METHODS

was introduced by Mr. J. B. Lawford and Capt. H. S. Browning.

Mr. Lawford assumed that the "newer methods" dated from the introduction of organic arsenic compounds in the treatment of syphilis. In sleeping sickness, organic arsenic compounds, especially atoxyl, were already in use, and in spite of the occurrence of numerous cases of blindness following their administration in trypanosomiasis, the same preparations were extensively prescribed to patients suffering from ocular syphilis, as well as to those with other manifestations of the disease. The frequency of optic nerve atrophy after the use of atoxyl and kindred preparations of arsenic, soon led to the abandonment of those drugs. The introduction of salvarsan, in 1910, provided a more suitable and less dangerous arsenic compound, and this and neo-salvarsan have been employed very extensively in ocular syphilis. He suggested that as there was very general agreement as to the value and efficiency of salvarsan therapy in ocular lesions in the early periods of syphilis, primary, secondary and early tertiary stages (i.e., chancre of eyelids, iritis, cyclitis, etc.) discussion on this aspect from the clinical side would not be very helpful. In reference to the results with salvarsan in some of the later ocular manifestations of syphilis, concerning which much difference of opinion exists, he hoped for a profitable debate. He drew attention to the use of salvarsan in oculo-motor paralysis, ophthalmoplegia interna, and optic nerve atrophy of late syphilis, and in keratitis of the congenital form: and quoted cases from his own experience and from published records. He concluded with a brief reference to the reputed noxious effects of salvarsan and neo-salvarsan upon the optic and other ocular nerves, and pointed out that, in the opinion of most observers, the complications met with after the administration of these drugs were, in reality, fresh manifestations of the syphilitic virus. Such development often underwent amelioration by continued use of the drug, differing absolutely in this respect from the nerve lesions following treatment by atoxyl. He submitted that there was no evidence that syphilis could be eradicated by salvarsan treatment alone, and that prolonged medication by the classical anti-syphilitic remedies was essential, even when the results of salvarsan treatment had been most brilliant.

Capt. Browning first dealt with the question of the diagnosis of syphilis, which too frequently rested on clinical evidence alone. All the further aids to diagnosis should be employed. It was not true that all cases of choroiditis were syphilitic in origin. In every case of suspected eye syphilis, a careful and systematic examination of the patient's whole body should be carried out, and repeated examination of the lesions should be made with the dark-ground condenser. Properly carried out, the Wassermann was one of the most reliable serological tests, and he considered the original method the most reliable for general use. But a negative Wassermann did not mean that the patient had not got syphilis. Laboratory tests should be considered in conjunction with all other known facts. Repeated doses of arsenical preparations, combined with mercurial treatment, were needed to bring about a cure. He proceeded to speak of the appropriate doses of various drugs, and methods of administration. Kharsivan he found more toxic than salvarsan, and neo-kharsivan even more so, and undesirable symptoms were more frequent after its administration than after salvarsan and neo-salvarsan. Every case must be treated on its own merits. His trials of Intramine and Ferrivine did not encourage him to continue their use.

The ensuing debate became general.

The Committee of the Society which had been appointed to investigate cases of detachment of the retina presented their report, through Mr. Leslie Paton. It detailed the findings in 85 cases, half of which were British. The best visual results ensued in cases in which reposition of the retina occurred after four or five months, though one case gave a good result after 18 months. In most of the cases some form of scleral puncture was carried out. None of the albuminuric cases were operated upon. Much satisfaction was expressed with the labours of the Committee, who were, on the proposition of Sir George Berry, cordially thanked.

Friday afternoon was devoted to the examination and discussion of an extensive series of cases of peculiar interest at the Central London Ophthalmic Hospital, Judd Street.

On Saturday the Society resumed the hearing and discussing of short papers. Major Cunningham and Professor De Lapersonne contributed papers on war injuries of the eye, in which they gave details of many cases, and discussed the best measures of treatment. Colonel Lister said that in the case of foreign bodies in the eye, so long as there was no prolapse of uvea or lens capsule, there seemed no danger in keeping that eye. The

lens had been frequently injured in the war. It was extraordinarily satisfactory that there seemed to have been no case of sympathetic ophthalmia: there could scarcely have been none, but he had not heard of any cases. He suggested a new operation for cases of prolapse of uvea, and emphasised the importance of avoiding tension, if necessary by making a counter-puncture. If an eye with a foreign body in it did not quiet down, the practice was to remove the eye. If it did quiet down, the eye was left to be watched and treated as required in England. He invited ophthalmologists to criticise the practice of those at the front, and allow the latter to have the benefit of such suggestions.

The following papers were read:

Dr. C. O. Hawthorne: Retinal changes in Glycosuria.

Capt A. W. Ormond: Treatment of Large Traumatic Hæmorrhages in the Vitreous.

Mr. J. Gray Clegg: Spontaneous Intraocular Hæmorrhages.

Capt. Beatson Hird: Notes on a Case of Tumour of the Retina (this was referred to a Pathological Committee).

HARVEIAN SOCIETY OF LONDON.

CLINICAL MEETING HELD ON THURSDAY, MAY 11TH, 1916.

The President, Dr. Edmund Cautley, in the Chair.

The following cases were shown:—

(1) Dr. Graham Little: (*a*) Septic papillomatosis of the lower extremity which had led to great overgrowth of the limbs. (*b*) An ulcer of thirteen years' duration which had originated in a soft sore and led to extraordinary scarring.

(2) Dr. Langmead: Intrathoracic tumour in a young woman. The X-rays revealed a shadow behind the upper part of the sternum, and the microscopical examination of an excised portion supported the view that the mass was lymphadenomatous.

(3) Dr. Stewart: (*a*) Multiple osteomata developing in an adult man. (*b*) A man who had been successfully operated on for temporo-sphenoidal abscess which reached to a depth of five inches from the surface.

(4) Mr. C. A. Pannett. A patient with stone in the ureter. The accompanying radiogram demonstrated the stone in a dilated part of the ureter with an opaque bougie alongside of it.

(5) Dr. Jaffe: A woman with enlarged liver and jaundice.

Mr. Cope showed a photograph of the injuries caused by an electrical current of 11,000 volts on a patient who survived three days after the accident.

The cases were discussed by the President, Dr. Langmead, Mr. Pannett, Dr. Dawson, and others.

SPECIAL REPORTS.

MEDICAL SERVICES IN MESOPOTAMIA.

General Sir John Nixon, K.C.B., in a despatch dealing with the operations in Mesopotamia from October to December, 1915, refers to the medical services as follows:—

Major W. C. Croly, R.A.M.C., has been in medical charge of the staff at general headquarters, and has shown himself always the right man in the right place, and to have taken the keenest interest in his work and care of those whom he had in charge. The medical services have had to face very trying and unusual conditions. On more than one occasion the number and severity of the casualties have thrown the greatest strain on them, but the organisation and efficiency of the arrangements have ensured as speedy an evacuation of the wounded as the means placed at their disposal permitted. In this connection I wish to bring forward the name of Surgeon-General H. G. Hathaway. The British General Hospital has throughout been in charge of Lieut.-Colonel D. J. Collins, Royal Army Medical Corps, whose zeal, energy, and organising power have rendered it a model hospital of its kind. Credit is also due to Lieut.-Colonel G. B. Irvine, Indian Medical Service, for his devoted and careful supervision of the Indian General Hospital.

Captain W. H. Hamilton, I.M.S., is also mentioned for having rendered good service.

OBITUARY.

DR. CHARLES WILKINSON, L.R.C.P. AND S., OF SCARBOROUGH.

The death has occurred, in a nursing home, of Dr. C. A. Wilkinson, of Scarborough. Educated at Edinburgh, he qualified L.R.C.P. and S. in 1894. Dr. Wilkinson, who was 47 years of age, had only been ill four days. He had an extensive practice in Scarborough, where he had resided for about 18 years. He was formerly Deputy Medical Officer of Health for the borough, and was one of the Medical Officers under the Scarborough Board of Guardians. He was the founder of the Scarborough Branch of the St. John Ambulance Brigade, a work in which he took a great interest. He is survived by his widow.

DR. C. J. GIBB, M.D., NEWCASTLE-ON-TYNE.

Dr. Charles John Gibb, the oldest medical practitioner in Newcastle-on-Tyne, died in that city on May 13th in his 90th year. Dr. Gibb was the son of Dr. John Gibb, who practised in Newcastle for forty years. He studied in London and abroad, and qualified M.R.C.S., L.S.A. in 1847. In 1859 he took the degree of M.D., Durham. He was house surgeon at the Royal Infirmary in Newcastle for some years, and he was also lecturer in the Newcastle College of Medicine on anatomical demonstrations. Afterwards he became lecturer in pathology. During the cholera epidemic in Newcastle in 1853, when more than 1,500 deaths were recorded, Dr. Gibb assisted strenuously in stamping out the disease, and was the author of a report on "Epidemic Cholera."

DR. ARNOLD W. WARRINGTON LEE, M.D., F.R.C.S., MANCHESTER.

The death is announced of Dr. Arnold W. W. Lee, which took place at Birkdale after a long illness. Dr. Lee was a comparatively young man. Educated at Owen's College, he qualified M.R.C.S., L.R.C.P. in 1889. Graduating M.B., London, in 1890, and M.D. in 1892, he also took the F.R.C.S., England, in the latter year. Specialising in obstetrics and gynæcology, he was surgeon to the St. Mary's Hospital, Manchester, and lecturer on Midwifery and Diseases of Women at Manchester University. He wrote largely on the subjects to which he devoted his professional life.

DR. J. G. HOPE, L.R.C.P. AND S., EDINBURGH.

The death is announced of Dr. J. Gilbert Hope, 6, Royal Circus, Edinburgh. Dr. Hope, who passed away on Saturday evening after a short illness, was 42 years of age. He was a native of Edinburgh and qualified eighteen years ago. He had been in practice for twelve years in the North Side of the city, and was Medical Officer to the New Town Dispensary. Dr. Hope leaves a widow and three boys and a girl.

REVIEWS OF BOOKS.

ANATOMY (*a*).

The essential portion of this volume extends to some sixteen hundred and fifty pages, many of which are in very small print, so that as regards size it competes with the majority of the text-books on systematic anatomy used, chiefly for reference, by students in this country. It differs from them, however, in the fact that only the bones, central nervous system, eye, ear and embryology are dealt with systematically. The rest of the book is concerned with the anatomy of the body considered in regions, and at the end of each of these sections there is a guide to the dissection of that "part." It is, in other words, a dissector's guide with the addition of a good account of osteology and an indifferent one of development. The present volume is too unwieldy for this purpose, and would be more popular if issued in two parts, and advantage might be taken of this alteration to use thicker paper and less trying print.

The book is a very good one, the least satisfactory section being that devoted to embryology, which contains a total of twenty-one figures, all of which deal exclusively with the very earliest phases. The formation and fate of such difficult and important structures as the septum transversum, pericardial cavity, pleural cavities and pleuro-peritoneal openings being without a single illustration.

In the table of sexual differences in the os innominatum, no reference is made to two of the most useful points, namely, the shape of the sciatic notch and the sulcus pre-auricularis. Similarly, with reference to the femur no notice is taken of the value of the diameter of the head or of the bicondylar width as a guide to sex.

The old nomenclature is used for the most part, but new terms are used here and there, apparently by chance. In the description of the muscles on the back of the forearm, new names are used in two cases (extensores pollicis brevis and longus), but the older term is retained for the abductor pollicis longus. There is an appendix which deals with nomenclature. The person who drew it up was apparently under the impression that the Basle nomenclature in many cases only turned the English name into dog Latin. This portion has many errors which could have been avoided by reference to the official glossary. Important changes are not referred to at all; for example, there is no mention of the radial nerve being the new term for the musculospiral. The glossary, which gives the meaning of many technical terms strange to beginners, is a useful addition. The book is a good one, but could be improved by careful editing.

LITERARY NOTES.

We have received a copy of "The Medical Who's Who" (Fulton Manders Publishing Co., 75, Chancery Lane, London, W.C. Fifth year, 1916. Price, 10s. 6d. net), stated to cover the period March 1916 to March 1917. To judge by the increase in size, the volume is appreciated. Last year it contained 1,000 pages, this year 1,200. It gives biographical details of 15,000 medical practitioners. Forms were sent to all names appearing on the Medical Register and supplementary lists, and "The Medical Who's Who" contains the information as supplied, presumably by the recipients of the forms. It should be observed that "The Medical Who's Who" is not a list of the "big pots" of the profession. The policy of the publishers is to include the names of all doctors who supply particulars and return the forms sent.

The work is therefore not a limited list of injudicious selection.

The particulars are included free from any condition.

The present publication includes details of medical and nursing periodicals.

The type is clear and easily read, and the book will be found convenient for reference.

* * *

Volume II. of the "Dublin University Calendar" for the year 1915-1916 (Dublin: Hodges, Figgis and Co., 1916) consists chiefly of lists of names of prizemen and honour men and recipients of degrees, together with the rolls of present members of Trinity College, of the Senatus Academicus, and of University Electors. It is not more accurate than other academic year-books. The roll of electors gives much strange informaton. For instance, from page 304 we learn that Newry is in Co. Louth (the *Daily Mail* recently placed it between Kildare and Dublin). On page 262, a well-known London barrister is described as "Rev.," and his address is given as "Rathmines, Dublin." More surprising still is the description on page 298, of one of the best-known Dublin obstetricians as "Chief Justice Sierra Leone."

MEDICAL NEWS IN BRIEF.

Walsall M.O.H. and his Recruiting Fees.

At Walsall Town Council meeting on 8th May Dr. Lynch drew attention to a statement in the report of the General Purposes Committee that it had been decided to allow the borough medical officer of health (Dr. Shore) to retain the fees which he received for the examination of recruits under Lord Derby's scheme. He proposed as an amendment that the subject be referred back until some information was available as to the total amount of the fees. He said he did so on the ground that the money belonged as much to the ratepayers as did the fees received for letting the Town Hall.

Mr. Lester seconded the amendment, but Dr. Layton, who mentioned that he was secretary of every medical institution in the town, denied that the practitioners as a body had raised any objection to Dr. Shore earning these extra fees. Much of the work was done by him long after office hours, and frequently he was engaged until midnight. The work was of a particularly strenuous nature, and it was simply undertaken by Dr. Shore because the practitioners of the town were unable to undertake it.

Alderman Pearman-Smith said that, strictly speaking, these fees should no doubt be paid into the borough fund, but the Council took the view that they were earned under abnormal conditions, and that the work was undertaken at the request of the military authorities.

Mr. Tucker added that it would be mean and contemptible if the Council attempted to "purloin" these fees.

The amendment only received three votes, and the recommendation was agreed to.

Lady Doctor for Hyde.

The Hyde Town Council on 8th May decided to appoint a lady doctor at a salary of £350 a year as medical officer for the Education Committee and for the Maternity and Child Welfare Committee.

The discussion disclosed a strong feeling in favour of taking action to protect child life, but several members urged that, with some of the Hyde medical men serving in the war, the present was not an opportune time for creating new appointments for which they had no chance of applying.

Soldiers and Drugs.

The following Order has been made by the Army Council under the Defence of the Realm (Consolidation) Regulations, 1914:—

No person shall sell or supply any article specified in the Schedule to this Order to or for any member of his Majesty's Forces unless ordered for him by a registered medical practitioner on a written prescription, dated and signed by the practitioner with his

(*a*) "Manual of Anatomy, Systematic and Practical, including Embryology." By A. M. Buchanan, M.A., M.D., C.M., F.R.F.P. and S.Glasg. With 675 illustrations. Third edition. Demy 8vo. Pp. xii. and 1743. University Series. London: Bailliere, Tindall and Cox. 1916. Price 21s. net.

full name and qualifications, and marked with the words, "Not to be repeated," and unless the person so selling or supplying shall mark the prescription with his name and address and the date on which it is dispensed. Schedule. — Barbitone, benzamine lactate, benzamine hydrochloride, chloral hydrate, coca, cocaine, codeine, diamorphine, Indian hemp, opium, morphine, sulphonal and its homologues, all other salts, preparations, derivates, or admixtures prepared therefrom or therewith.

Royal College of Surgeons of England.

AT the Primary Examination at the Royal College of Surgeons of England for the Fellowship in Anatomy and Physiology, held on May 3, 4, and 9, 34 candidates presented themselves, of whom 11 were approved and 23 were rejected. The following are the names and medical schools of the successful candidates:—F. C. Alton, M.B., B.S.London, M.R.C.S., L.R.C.P., G. V. W. Anderson, J. M. Bickerton, H. B. Bullen, B.A., Dorothy Gilford, R. B. Green, A. J. McNair, M.B., B.C.Cantab., M.R.C.S., L.R.C.P., L. M. Moody, R. J. Perkins, H. B. Russell, and J. Victory.

Falling Cambridge Funds.

THE Financial Board of Cambridge University, in an estimate of income and expenditure for 1916, state that the income of the University Chest, which is derived mainly from fees, was £53,401 in 1913, £46,812 in 1914, and last year £33,704—or over 30 per cent. less than in 1913. They estimate that the income for 1916 cannot be expected to exceed £21,550.

As against this, the normal charges on the Chest for the present year are expected to amount to £37,750, showing a deficiency of £16,200. The Board propose to transfer certain sums from the Common University Fund, which is almost entirely made up of contributions from the colleges, reducing the deficiency at the end of the year to £5,200.

Although the colleges are almost depleted of students, they have increased their contributions to the Common University Fund from £23,796 in 1914 to £25,706 in 1915. The estimated receipts of this fund for the present year amount to £29,356, and the estimated expenditure to £16,000, leaving a balance of £13,356; but of this £9,500 will be required in 1917 to meet charges which fall to be paid before the income of 1917 is available.

The Local Examinations and Lectures Syndicate are prepared to contribute from the fund at their disposal £2,000 for general University purposes in the present year. The Board recommend that this sum be applied towards reducing the debt of £7,522 on the Examination Rooms Building Account.

Doctors ask Higher Allowances.

THE doctors who give their services to the members of the Kirkintilloch and Twechar Miners' Association have sent in a representation for increased allowance for professional attendance on the miners' wives and families. At present each worker, whether married or single, contributes 2d. per week for the doctors' fees. A great many of the unmarried men have joined the Colours, so that the amount for the doctors has been greatly reduced. The prices of medicines and locomotion have also increased.

Salisbury Spotted Fever Epidemic.

THE epidemic of cerebro-spinal fever among the British and Canadian troops in the Salisbury area in 1914 is the subject of a Local Government Board report.

Dr. R. J. Reece says:—

"The outbreak in the city of Salisbury commenced on December 15, 1914, with the case of a hospital nurse. There were no cases at that time known to exist in the city of Salisbury. But it was reported after the nurse's death, which occurred in 24 hours after the onset of the disease, that she was frequently in the company of a young officer of the Canadian Expeditionary Force, to whom she was said to be engaged to be married, and after many inquiries this officer was visited and a swab was taken from his throat. The cultures showed infection of his throat with the meningococcus. In the circumstances, and lacking any other known source of infection, it does not seem unreasonable to suppose that the earliest known of the cases that occurred in the outbreak in this epidemic had its origin from this officer."

Metropolitan Hospital, London.

AT the annual meeting of the Governors of the Metropolitan Hospital, Kingsland-road, last week, Mr. T. Dyer Edwardes, in moving the adoption of the report, stated that during the past year the in-patient accommodation had been increased to three times its former size, in order to find room for sick and wounded soldiers. Of the 360 beds, 260 were for military patients, which included the Howard de Walden wards provided at a cost of £2,000 by Lord and Lady Howard de Walden. The year had been a very trying one from a financial standpoint, and while the expenditure had amounted to £19,331, the income had only reached £16,696, leaving a deficit of nearly £3,000. He trusted that that deficit would be cleared off during the current year.

German Army Medical Statistics.

ANOTHER Army Medical Congress was held last week at Warsaw. The chief German representative, Professor von Schjerning, provided some new statistics. He said that 24,000 doctors were in the service of the Army—three-quarters of them in the field, and one-quarter at home. There were 3,000 doctors working with the Red Cross, 400 dentists, 1,800 chemists, and 92,000 men in the medical services. The voluntary nursing service employed 72,000 persons in Germany and 22,000 on the lines of communication. There were 238 hospital trains taking wounded and sick back to Germany from the hospitals near the front. They had 26 large steam laundries on the lines of communication, and on the frontier there were 18 large disinfection establishments dealing with 100,000 men a day.

Birmingham Doctor's Arduous Labour.

A DOCTOR who applied at the Birmingham Tribunal on 8th May for exemption for his chauffeur said he had unsuccessfully tried to replace the man. He had a panel of 3,000 patients in a munitions area and would far sooner join the Colours himself than keep on with his present work, which was "simply killing." The chauffeur was granted exemption for a month.

Hospital Economy.

IN the interests of economy, the council of the Charing Cross Hospital consider that the extensive printing of the annual report (which costs between £250 and £300) should be abandoned. A certain number will be printed, and on the application of any subscriber who wishes to have one a copy will be posted to him.

Water Purification.

AT a meeting of the Metropolitan Water Board on May 12th, the Water Examination Committee reported that experiments conducted in the Board's laboratory in the economical purifying of water had been so satisfactory that it had been decided to test the method under actual working conditions for a month at a cost of £360.

Women Doctors.

THE incursion of women into the ranks of the medical profession began, of course, long before the war. But the war has undoubtedly been a great stimulus to the movement. Exact figures are not available, but there seems to be no question that an increase measuring, it is said, in some instances, 50 per cent., has occurred in the ranks of women students. The same thing applies to women dispensers, who are naturally in great demand at the present moment. Meanwhile women doctors are doing men's work in many directions.

Concession to Welsh Medical School.

COLONEL E. M. BRUCE VAUGHAN made an interesting announcement with regard to the progress of the Welsh Medical School at a meeting of the King Edward VII. Hospital Committee on May 10th, when General H. H. Lee presided. He said that Mr. McKenna had caused the plans of the complete medical school to be approved, and had intimated that he would not stand in the way if the assent of the Minister of Munitions could be obtained to the building of the public health department.

Colonel Bruce Vaughan paid tribute to the splendid spirit in which the members of the honorary medical staff had approached the subject.

A committee was appointed, consisting of Dr. Rhys Griffiths, Dr. Mitchell Stevens, Dr. Ewan Maclean, Colonel E. M. Bruce Vaughan, the Rev. Canon David Davies, and one member of the special department, to nominate who should give evidence before the Royal Commission when required.

Enemies' Medical Supplies.

SIR M. DE BUNSEN, in a statement to the Associated Press with regard to the conveyance from America to the Central Powers of medical supplies, says that the British Government, while prepared to allow the despatch of medical supplies to any American Red Cross units which may be working for the Central Powers upon receipt of assurances as to their employment, is not prepared to allow medical supplies to be generally imported by the enemy. A general permit to import these supplies would mean that the enemy would be able to draw large quantities from all parts of the world, and that they would be free from all necessity of using their existing supplies of such articles as rubber for medical purposes and to devote them exclusively to war-like ends. If the enemy suffered from a shortage of certain commodities for medical purposes owing to the demands of the military services their remedy, if they wished to safeguard the interests of their wounded, was obviously, the statement concludes, first of all to allocate a sufficient amount of available supplies to these purposes.

In the Franco-Prussian War the Germans did not allow medical supplies to enter Paris, and in the present war they have prohibited the export of German medical books, because they openly profess to grudge to other countries the benefits of German scientific skill. Their submarine blockade is avowedly intended to cut off all supplies to Great Britain, and Germany has deliberately violated the Geneva Convention by attempting to torpedo the hospital ship *Asturias* and by actually torpedoing the hospital ship *Portugal*, thereby causing the deaths of a large number of nurses and helpless wounded men. Charges of inhumanity from those who have done such things should be closely scrutinised. As to the legal right of the Allies to intercept medical supplies there can be no doubt.

The Asylum Workers' Association.

THE annual general meeting of the Asylum Workers' Association will be held to-day (Wednesday), May 17th, at 3 p.m., in the rooms of the Medical Society of London, Chandos Street, Cavendish Square. The chair will be taken by Sir John Jardine, Bart., K.C.I.E., M.P., LL.D., President of the Association. The Asylum Workers' Association was founded in 1895, to promote the interests and welfare of asylum nurses and attendants, and of others engaged in nursing the insane, and thereby improve their professional status in the nursing world. The membership has now reached 2,626.

Assistance for Reserve Medical Services.

THE Secretary of the War Office makes the following announcement:—It has been suggested that benevolent societies should be formed for the benefit of the families of officers and other ranks of the medical services auxiliary to the Regular Royal Army Medical Corps—namely, the Special Reserve, the Territorial Force, and the new armies. A meeting, presided over by the Director-General, will be held in the Lecture Theatre of the Royal Army Medical College, Grosvenor Road, London, S.W., on Thursday, June 1st, at 2.45 p.m., and it is hoped that as many officers as possible will attend.

Factory Surgeons and National Economy.

THE Home Secretary (Mr. Herbert Samuel) received at the Home Office, on May 5th, a joint deputation from the Incorporated Association of Certifying Factory Surgeons and the British Medical Association, who protested against the following recommendation in the final report of the Committee on Retrenchment in the Public Expenditure: "We understand that the reports of certifying surgeons on accidents, which cost £12,500 per annum, are now of little value, and entail in all serious cases a duplication of the reports made by the inspectors. The Committee on Accidents in Factories recommended that legislation should be obtained to enable them to be dispensed with, and we concur in this proposal."

Mr. Samuel replied that there was a great demand for doctors' services in every direction arising from the withdrawal of a great number of medical men from civil work to undertake military work, and this was specially a time when it was difficult to justify continuing to require a number of doctors all over the country to spend time in making reports which had been declared by an investigating committee to be superfluous. He would lay before Parliament shortly a Bill dealing with similar points of economy in connection with the Home Office, and if he did not include the one to which the deputation referred his position in the House of Commons would be somewhat remarkable. He had considered the memorial sent in by the Association, and it had not convinced him.

Milk and Health.

THE Lord Mayor of Sheffield (Councillor F. A. Warlow), presiding at the annual meeting of the Children's Hospital on April 14th, made a strongly-worded reference to the growing practice of adulterating milk, which had been brought before the City Council. He said that when he looked ahead, and considered the great wastage of the young life of the Empire that was taking place, the great importance of looking after the child life was brought home to us more than ever. The enormous increase in the milk adulteraton of the city was a matter of considerable importance. "It is our duty," said his lordship, "to prosecute as far as we possibly can a war against this infamous adulteration, and no steps will be neglected to stamp out this crime in our city." He added that he scarcely thought that the people who were responsible for the adulteration realised what they were doing, because the practice was not only a fraud, but had a deplorable effect upon child life, by robbing them of the most nutritious part of the milk.

Hooks in Preserved Meat.

AN Italian Army doctor, a member of a well-known Anglo-Italian family, who is now serving on the Italian front, writes as follows:—

We are obtaining every day more striking evidence of the appalling methods of German Kultur. We have discovered tiny steel hooks of microscopic size in tins of preserved meat from America. We have had naturally to stop at once the use of this stock.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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REPRINTS.—Reprints of artioles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

THERAPEUSIS.—The article has come to hand; as soon as space and other arrangements allow, we shall be glad to publish it.

A USEFUL HAND.

AT Bow County Court last week, it was stated that a one-handed casual labourer had been earning 11s. 5d. a day at the docks.

DR. S. H. C.—Recent investigation seems to indicate that alcohol interferes with the elimination of uric acid, leading to the retention of the latter—unoxidised—in the tissues.

A PANEL DOCTOR'S TRIALS.

A PANEL doctor sent a letter to the judge at Westminster County Court on May 9th, saying he would pay two judgment summonses as soon as he got the balance of money due for 1914 and 1915 from the London Insurance Committee.

EXCELSIOR (Birmingham).—We regret having overlooked our correspondent's query. The reply is in the affirmative, subject to the approval of the MS.

DR. SEQUEIRA.—Regret the note arrived too late for insertion.

RACECOURSE MILITARY HOSPITAL.

THE five-shilling stand at Ascot, closed several weeks ago for painting and other improvements, has been reopened as a military hospital.

M.R.C.S., L.R.C.P. (Leeds).—We have ascertained that the book is now out of print, but a new edition is being prepared.

EIGHTEEN CHILDREN IN EIGHT YEARS.

DR. J. S. DORSEY, of Langon, D.C., reports the birth of 18 children in eight years as follows:—First birth, single; second birth, twins; third birth, triplets; fourth birth, twins; fifth birth triplets; sixth birth, twins; seventh birth, triplets; eighth birth, twins. Mother 32 years old at last birth. All lived to be 20 years old, then died.

DR. I. G. C. is thanked for his paper, which is marked for early insertion.

SUMMER TIME.

AT Overslag, a village partly in Holland and partly in Belgium, "summer time" is causing great confusion. The church is on Belgian territory, and the tower clock indicates German summer time, but in the church itself the old Belgian (Greenwich) time is still observed. The Dutch officials follow the new Dutch summer time, and in the Dutch school the time differs by an hour from the German summer time. At the same hour, therefore, the tower clock shows 2 o'clock, the clergyman's watch 12, the school clock 1, and the Dutch officials' clock 1.20.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, MAY 17TH.

ROYAL MICROSCOPICAL SOCIETY (20 Hanover Square, W.).—Paper—Mr. J. W. Purkiss: Some Suggestions Regarding Visual Efficiency in the Use of the Microscope and other Optical Instruments.

THURSDAY, MAY 18TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF DERMATOLOGY) (1 Wimpole Street, W.).—5 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917. Exhibition of Cases (at 4.30 p.m.): Cases—Dr. George Pernet: (1) Tertiary Syphilis in a Woman treated by Intramine; (2) Urticaria Pigmentosa in an Infant. Dr. Graham Little: (1) Parakeratosis Variegata; (2) Lichen Scrofulosorum with Scrofulodermia.

FRIDAY, MAY 19TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF OTOLOGY) (1 Wimpole Street, W.).—5 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917. Cases and Specimens will be shown by Mr. J. S. Fraser, Sir William Milligan, Mr. Sydney Scott, Mr. W. M. Mollison, and others. Mr. W. M. Mollison: A Note on the Monochord.

ROYAL SOCIETY OF MEDICINE (SECTION OF ELECTRO-THERAPEUTICS AND PHARMACOLOGY) (1 Wimpole Street, W.).—8.30 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917. Exhibition of X-Ray and Electro-Medical Apparatus, Radiographs, Lantern Slides, etc., will also be exhibited. Members wishing to show Plates, etc., will kindly communicate as soon as possible with Mr. S. Gilbert Scott, 6 Bentinck Street, W.

SOCIETY OF TROPICAL MEDICINE AND HYGIENE (11 Chandos Street, Cavendish Square, W.).—5.30 p.m.: Paper—Major J. M. Atkinson, R.A.M.C.: Cerebro-spinal Fever, with the Notes of Some Cases. Dr. A. C. Stevenson will show some Specimens of Nodules in Lung from a Case of Morphia Injectors' Septicæmia (Whitmore's Disease), and Cultures of a Bacillus isolated from the same.

MONDAY, MAY 22ND.

ROYAL SOCIETY OF MEDICINE (SECTION OF ODONTOLOGY) (1 Wimpole Street, W.).—8 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917. Paper—Dr. J. Howard Mummery: The Structure and Arrangement of the Enamel Prisms, especially as shown in the Enamel of the Elephant.

TUESDAY, MAY 23RD.

ROYAL SOCIETY OF MEDICINE (SECTION OF MEDICINE) (1 Wimpole Street, W.).—5.30 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917.

Vacancies.

City of London Hospital for Diseases of the Chest, Victoria Park, E.—Assistant Resident Medical Officer. Salary £150 per annum, with board, residence and laundry provided. Applications to George Watts, Secretary.

Borough of Lewisham.—Tuberculosis Dispensary Medical Officer. Salary £250 per annum. Applications to Edwd. Wright, Town Clerk, Town Hall, Catford, S.E.

The Guest Hospital, Dudley.—Assistant House Surgeon. Salary £120 per annum, with board, rooms, attendance and washing. Applications to the Secretary.

Belfast Municipal Sanatorium.—Assistant Resident Medical Officer. Salary £200 a year, with board and residence at the Sanatorium. Applications to Town Clerk's Office, City Hall, Belfast.

Birmingham General Dispensary.—Resident Medical Officer. Salary £250 per annum, with furnished apartments, fire, lights, and attendance. Applications to Ernest W. Forrest, Secretary, 32 Union Street.

Borough Hospital, Birkenhead.—Junior House Surgeon. Salary £170 per annum, with board and laundry. Applications to the Secretary.

St. Bartholomew's Hospital, Rochester.—Clinical Assistant. Salary £110 per annum, with board, residence, and laundry. Applications to the Secretary.

Nottingham General Hospital.—Assistant House Surgeon. Salary £250 per annum, with board, residence, and laundry in the Hospital. Applications to the Secretary.

Beckett Hospital and Dispensary, Barnsley.—House Surgeon. Salary £250 per annum, with apartments, board, and laundry. Applications to R. F. Pawsey, Honorary Secretary.

Appointments.

GROSE, JOHN SOREY, L.R.C.P.Lond., M.R.C.S., Medical Officer and Public Vaccinator for the Abbotsham, Buckland Brewer, and Bideford Districts, and Medical Officer to the Workhouse, by the Bideford (Devon) Board of Guardians.

HAY, PERCIVAL J., M.D., Ch.B.Edin., Honorary Ophthalmic Surgeon to the Sheffield Royal Hospital.

HUXLEY, FRANCES M., M.D.Viet., Assistant Surgeon to the South London Hospital for Women.

MACKENZIE, LEWIS, F.R.C.S.Eng., L.R.C.P.Lond., Acting Tuberculosis Medical Officer for the Borough of Barnstaple (Devon).

PEARSON, ELLIS, F.R.C.S.Edin., L.R.C.P.Edin., Medical Officer for the Milton District by the Barnstaple (Devon) Board of Guardians.

UMANSKI, AUGUSTA, M.B., B.Ch.Leeds, Assistant Medical Officer to the Infectious Diseases Hospital, Seacroft, Yorks.

Births.

BAHR.—On May 9th, at 12 Vicarage Gardens, Kensington, W., the wife of Captain P. H. Bahr, R.A.M.C., of a son.

BYAM.—On May 5th, in Cairo, the wife (*née* Stiven) of Major Wm. Byam, R.A.M.C., of a daughter.

NEWSHOLME.—On May 7th, at 20 Lingfield Avenue, Kingston-on-Thames, the wife of Lieutenant Henry Pratt Newsholme, R.A.M.C., of a son.

Marriages.

GRIFFIN—PINN.—On May 4th, at the Congregational Church, Snaresbrook, Captain Cyril J. A. Griffin, R.A.M.C. (S.R.), son of the Rev. C. Griffin, Auckland, New Zealand, to Jessie Elizabeth, daughter of the late William Pinn, Port Elizabeth, South Africa.

PASLEY—ELLIOTT.—On May 8th, at St. Mary's, West Kensington, Claude John Burgoyne Pasley, M.R.C.S., West African Medical Staff, son of the late N. C. Burgoyne Pasley, M.R.C.S., Trinidad, B.W.I., and Mrs. Pasley, of 3 Argyll Mansions, Kensington, to Blossom Emily, youngest daughter of the late Major William Elliott, Royal Artillery, and Mrs. C. A. Herbert, of 25 Richmond Place, Brighton.

WILLIAMSON—BOMFORD.—On May 6th, at St. Nicholas, Sutton, Surgeon David J. Williamson, R.N.V.R., to Joan, daughter of Mrs. Woodburn J. Bomford, of Sutton.

Deaths.

HARRISON.—On May 5th, suddenly, at Belize, British Honduras, the Hon. Dr. J. H. Hugh Harrison, J.P., F.R.G.S., M.R.C.S., Principal Medical Officer, Member Legislative Council, British Honduras, aged 52 years.

ROE.—On May 6th, at Ellesmere, Shropshire, John Withington Roe, M.D., in his 86th year.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, MAY 24, 1916. No. 21.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

Whistling for Taxis.

THE ways of the law are indeed inscrutable. For quite twelve months I have been inveighing against the selfish and inconsiderate practice of whistling for taxicabs. In December last the readers of the *Times* took the matter up and the correspondence columns of the leading daily bore witness to the general feeling of indignation which the practice aroused. Then ensued a silence. On Monday, May 15th, the matter was reopened by a letter which begins as follows:—"A few days ago Mr. Paul Taylor, the Magistrate at the Marylebone Police Court, in imposing a fine of 5s. on a hotel porter charged with persistently using a cab whistle within a hundred yards of eight nursing homes and hospitals, is reported in the *Times* to have said that he had seen many complaints about whistling for cabs, but if those who complained would tell the public how it was to be avoided their letters would be more instructive than they were."

The Remedy.

MR. PAUL TAYLOR must be singularly devoid of imagination. In the very act of applying the deterrent, he asks how the offenders are to be deterred. It is true that a fine of five shillings is probably a mere trifle to the opulent people who thoughtlessly inflict this particular irritation upon their unfortunate neighbours, but that could be remedied by a stroke of the official pen. The mere fact of being summoned to appear before a magistrate to answer a charge of this kind cannot be a pleasant experience to anyone with self-respect; and if the real offenders, the employers, were summoned, instead of the porter who is only obeying orders, and if it were known that the employers would in future be so summoned, a very little activity on the part of the police would speedily put an end to the nuisance. The interesting and instructive point emerging from the proceedings in Mr. Paul Taylor's Court is that there exists a statute under which these disturbers of the peace can be summoned and, in some degree, punished. Let the police continue their beneficent activities, and before long the weary will be able to sleep.

Panel Medico-Political Union.

THE letter from Dr. Welply, of the Panel Medico-Political Union, which appears in our correspondence column, is an interesting pronouncement which clears up at least one point which before appeared ambiguous. He says that "any duly qualified medical practitioner within the meaning of Section 34 of the Medical Act, 1858, is eligible for membership of the Panel Medico-Political Union. I know very little about the Union, and naturally concluded that its name described it correctly. It now seems that the Union is really more inclusive than its name would imply, a fact which is of very considerable importance to those members of the profession who are not on the Panel. I venture humbly to suggest to Dr. Welply and his coadjutors that the word "Panel" should be removed from the title of their Union, so that doctors who are wise enough to hearken to the warning words which I have written in these columns may not be discouraged by a mere name from joining a young, vigorous and watchful organisation, which has the power to defend their interests.

The Menace.

DR. WELPLY estimates the number of panel doctors at 15,000, that is, at roughly one-half of the effective members of the profession in the British Isles. Of the remaining 15,000 a great many are actually or prospectively engaged in work which brings them directly or indirectly in contact with the State; parish doctors, medical officers of health, tuberculosis officers, medical officers in the Naval and Military Services, and the like. If the schemes for the establishment of children's clinics, maternity clinics, venereal clinics and other public services, which are now so much discussed are to take practical shape, a great many more doctors will be brought within the cribbing and confining influence of State regulations: and when the proposals for nationalising the hospitals materialise, as materialise they most certainly will, those who still remain outside that influence will be duly roped in. The next medical Bill which, so far from being *in nubibus*, is already in being, will propose very drastic changes in the conditions under which professional work is at present carried on,

and unless the profession is sufficiently well organised to defend its own interests, it will be enslaved. There is no other word for it.

The Defence.

IF medical men imagine that their interests are safe in the hands of the older institutions or associations they are woefully mistaken. In the fight over the Insurance Bill, the Royal Colleges stood disdainfully aside—how could they interest themselves in anything so vulgar as contract practice?—and the only Association which might be supposed to have the necessary knowledge and organisation, the British Medical Association, behaved precisely as those who knew it best expected it to behave—namely, like a set of bungling, self-satisfied noodles who had as many policies as there are raisins in a plum-pudding—always changing and always wrong. The result was what we now know it to be. One satisfactory issue from this orgy of peddling prejudice and rancorous incompetency has been the birth of a Union whose business is entirely medico-political, and I sincerely hope that Dr. Welply will be able so to arrange matters that every member of the profession, including women, will be able to take advantage of the new organisation which has for its laudable object the safeguarding of our interests *vis-à-vis* the sweating tendencies of mere politicians.

Dr. F. J. Smith and Mr. Bishop Harman.

THE latest exploit of the British Medical Association, *re* the notification of measles, to which I referred at length in our issue of May 3rd, has called forth a correspondence between Dr. F. J. Smith and Mr. Bishop Harman. This has been sent to us for publication by the last-named, and will be found in another column. Dr. "F. J.," whose originality and independence of thought have endeared him to a very wide circle in the profession, writes: "Is it true that the deputation from the head office of the B.M.A. to the L.G.B. admitted that one shilling would be a sufficient fee for notification of infectious disease?" To which Mr. Bishop Harman replies that the statement is not true. Mr. Harman is well within his rights in thus replying in the negative, especially as he goes on to confess that such an admission was actually made in the case of one particular infectious disease—namely, measles. Mr. Harman's apologia for making this admission, which naturally drew from the L.G.B. the unanswerable retort, "If measles is only worth one shilling, why not all the others?" makes curious reading. It exposes a truly British Medical mentality.

A War Economy.

"BUT we made it clear," says this wily diplomat, "that any exceptional fee for measles was to be considered only as a reduction on taking a quantity" (a worthy and dignified professional attitude) "and a war economy concession, and not the concession of the professional position." To talk about a war economy concession in discussing a question of principle which has no more to do with the war than it has to do with the Vatican, is as stupid and mischievous an irrelevancy as could possibly be found even in the annals of the British Medical Association; while the statement that there was no "concession of the professional position" displays a degree of muddle-headedness which is seemingly the monopoly of the middle-class wits at 429, Strand. The lady who, "swearing she would ne'er consent, consented," was probably related to, even if she were not identical with, the one who excused her illegitimate baby on the ground that it was "only a little one." The psychology of the representatives of the British Medical Association appears to be identical with that of these two historical damsels.

The King's Evil.

DR. PHINEAS ABRAHAM, in giving evidence in the leprosy case, told the judge that leprosy "was known as the 'King's Evil,' and was supposed to be cured by the touch of the King." Dr. Abraham ought surely to have known better. The King's Evil was a scrofulous condition. Dr. Johnson suffered from it, and was duly touched for it by Queen Anne in 1712. Among the counts in the indictment against the ill-fated Duke of Monmouth was one that he had dropped the "bend sinister" from his coat of arms and another that he had touched for the King's Evil. The practice of touching for morbus regis is erroneously said to have originated with Edward the Confessor. It was in reality brought from France by Edward III., who borrowed the practice from the French King over whom he had been victorious. "Les rois de France passaient pour guérir les écrouelles." A few years ago Professor Landouzy issued an interesting pamphlet on the subject on which I am unfortunately unable to put my hand, but in his Glossaire Médical (C. Naud. 1902) he describes écrouelles as "Adénite tuberculeuse du cou." The King's Evil was certainly not leprosy. Boswell says "Young Johnson had the misfortune to be much afflicted with scrofula, or the King's Evil," and then proceeds to tell the story of the "touching."

Another War Economy.

MR. R. J. ANGEL writes to the *Daily Chronicle* from the Engineer's and Surveyor's Department, Town Hall, Bermondsey, to call attention to a very serious menace to the health of the people of London, which ought to be emphasised and insisted upon by every medical man in the metropolis. Mr. Angel says: "I notice that certain London boroughs have decided to abandon the washing and watering of their roads, thus effecting a war economy. May I point out that this is one of the worst things that can happen to the metropolis. The dust and dirt of our roads consist of nothing less than dried sewage, possessing all the ingredients of disease and infection, and it has been proved over and over again that this dust, when blown into people's faces and into food shops, has been the cause of disease and ailments peculiar to hot weather. There are other ways of effecting economies than neglecting the cleansing of our streets." I hope that medical men resident in these offending boroughs will at once protest against this form of "economy." Nothing could be more shortsighted or unimaginative than the ordinary British Bumble, and he is here seen in his favourite and most characteristic occupation of pledging the prospective prosperity of posterity for a few present pence.

SINAPIS.

OF HORMONES, AUTACOIDS, CHALONES, ET ID GENUS OMNE.

Though it may be true that under the sun there is nothing new, there are nevertheless certain aspects of things true, which are so new, that strange verbal garments are necessary for their expression. Around such meagre knowledge of the activities of the ductless glands as we have already amassed there has grown up a vocabulary which is impressive and portentous, and it is still growing. The group of ductless glands themselves have been christened, rechristened and christened again, and the wake of each fresh ceremony has been strewn with adjectival and adverbial adventures most disconcerting to the workaday mind. The glands whose internal secretions were recognised as potent "regulators of metabolism" were found to include some which were not ductless, and the whole group was called internal secretory. Brevity then demanded something less cumbersome, and "endocrinous" was invented. This became "endocrinic," and is now not infrequently "endocritic." The latest and most authoritative work on the subject is entitled "The Endocrine Organs," (*a*) and it is here that we assist at the birth of the autacoids and chalones.

"Since the most characteristic feature of the action of these substances is the resemblance to the action of drugs, such as the vegetable alkaloids, I propose to employ for these specific substances the general title 'autacoid substances,' or, simply, 'autacoids' (αὐτός, self, and ἄκος, a medicinal agent or remedy). I would accordingly define an autacoid as a specific organic substance formed by the cells of one organ, and passed from them into the circulating fluid to produce effects upon other organs similar to those produced by drugs. Such effects are either in the direction of excitation, in which case the endocrine substances producing them are 'excitatory autacoids' and would come under the expression 'hormones,' or in the direction of restraint or inhibition, in which case they are 'restraining' or 'inhibiting autacoids,' and would be classed as 'chalones.' The action of an autacoid may therefore be described as 'hormonic' or 'chalonic,' according to the kind of effect it produces."

This is Sir Edward Schafer's contribution to the nomenclature of the new physiology which has been opened up by the study of the behaviour of these internal secretory organs, and, like the book in which the passage appears, it is essentially sane, helpful and orderly. Much has been written on this fascinating subject during the last ten years, of which it may be said that perhaps its most salient feature is the number of bewildering and contradictory statements which it contains. To attempt to follow the recent literature is to subject your brain to the experiences of a shuttlecock which is buffeted from one battledore to another until it falls featherless to earth. After such stupefying aerial adventures, endured over a protracted period, the relief to find yourself once more on solid ground is quite inexpressible. For it is the solid ground of our present knowledge, carefully epitomised and lucidly expressed, which the learned Edinburgh professor offers the reader in these 150 clearly printed pages. The book is founded on some lectures delivered at Stanford University, California, and does not pretend to be exhaustive. Its great merit, transient though that merit must necessarily be, is that it enables the student of the subject to pause, to take breath, and to adjust his vision while the magician's hand for an instant stays the machinery and bids the moving pictures be still.

In the case of so large a subject compressed into relatively so small an area—the book is full of illustrations—some of the component parts must necessarily suffer neglect. Of thyroid and parathyroid, of pituitary, of suprarenals, the accounts are delightfully succinct and satisfying; but of pancreas, spleen and gonads the whetted appetite craves for more. The gonads—*i.e.*, the testicles and ovaries—are developmentally perhaps the most important of all the endocrine glands, for, in their relations to sex characteristics both physical and mental, they hold the key to many large and burning social and political questions which still await solution. Sir Edward Schafer, as becomes his professional status, gives us physiology pure and simple; with philosophy, in these pages at any rate, he has no truck. But the reader who is in search of light and guidance on these questions need not despair. He has only to travel from Edinburgh to Liverpool, where he will find Dr. Blair Bell in a physiologico-psychological mood, and will hear him discourse—clearly, eloquently and scientifically, with a courage which passes all praise—upon the subjects which Sir Edward Schafer avoids.

Dr. Blair Bell writes as a gynæcologist: "In the following pages our subject will be Woman, and I shall endeavour to make clear, so far as our knowledge allows, the difficult problem of the female sex complex in all its ramifications." The result of this endeavour is a book (*b*) which the author modestly calls a monograph, in which he discusses the morphology, physiology, pathology, and last but not least, the psychology of the female sex from the point of view of the influence of the endocritic (that is Dr. Bell's adjective) glands. The term "sex complex" he defines as "the correlation of the internal secretions in regard to the sex functions."

These two books are in a sense complementary the one to the other. Professor Schafer's is a general foundation, upon one angle of which, and that by no means the least important, or the least interesting angle, Dr. Blair Bell has raised a superstructure full of credit to the builder. A wise practitioner is he who endeavours to keep abreast of the "new physiology" which has been opened up by the internal secretions, and he will find no better, surer or more suggestive guides than the two latest British writers on the subject.

(*a*) "The Endocrine Organs." By Sir Edward A. Schafer, F.R.S., Professor of Physiology in the University of Edinburgh. London: Longmans, Green and Co., 1915.

Miss Florence Sophia Jane Stogdon, of Chelsea, left £500 to the Coltishall Nursing Home.

(*b*) "The Sex Complex." By W. Blair Bell, M.D.Lond. London: Bailliere, Tindall and Cox. 1916. Price 12s. 6d.

CURRENT TOPICS.

Vivisection and the War.

AT the annual meeting of the Research Defence Society held this month, an interesting address was delivered by Mr. Ernest W. Hey Groves, late Major, R.A.M.C., returned from a year's work in Egypt. He dwelt mainly upon the enormous benefit derived in Army hospitals from the results of experiments on animals. In illustration he quoted the well known examples of tetanus and enteric prophylaxis, and in parenthesis pointed out that very great benefit often results to animals themselves from this experimentation, most obvious, perhaps, in the prevention of tetanus amongst horses by means of inoculation. Statistics from a German hospital show that before the use of antitoxin the cases of tetanus numbered 14 per thousand of wounded men, whereas after its routine adoption the number of cases fell to 1.6 per thousand. Experience in the Allied armies has been somewhat similar. Mr. Hey Groves deplored the fact that owing to restrictions of vivisection it has not been possible to equip research laboratories in connection with the military hospitals in England. At Alexandria, where science is not so hampered, the research work has proved to be of the utmost value, especially in the important diagnosis of infecting organisms, of which those causing meningitis in cases of head wounds were especially instanced. He emphasised the urgency of these experiments in many cases requiring that the tests be made upon the spot, and he deplored the absence of logic in the minds of those people of one idea who would allow a surgeon to take into his hands the life of their nearest relative, but would on no account trust him to refrain from inflicting unnecessary suffering upon a rabbit or a cat.

Medical Men and the Irish Rebellion.

AMONG those sentenced to penal servitude by Field General Court-Martial in Dublin, whose sentence was confirmed by the General Officer Commanding-in-Chief, was Richard Hayes, who was sentenced to twenty years' penal servitude. This is Dr. Richard Francis Hayes, who was medical officer of the Lusk dispensary district, in County Dublin. He was arrested in the Swords district with a number of volunteers after the rising. He is a Licentiate of the Royal Colleges of Physicians and Surgeons of Ireland, having received his diplomas therefrom in 1905. The names of three Irish medical men have appeared in the list of prisoners deported to England pending trial. One of them is stated by the *Manchester Guardian* to have been arrested without cause while walking through the streets of Dublin. Another was arrested at his residence in the West of Ireland, while a third was arrested in the South of Ireland while on his honeymoon.

Physical Culture.

THE late President of the New Jersey State Board of Health publishes an interesting paper in a recent number of the *Medical Record* entitled "A Practical Scheme to Improve the Physique of Americans." He considers that work of this kind to be effectual must be started in the schools and amongst the smallest children. He would have in each city an examining board to examine and report upon the health and physique of the school children, and to award prizes for health and beauty. He would have in each school one fully qualified medical man or woman, according to the sex of the pupils, appointed for whole-time work. The duties of this person would be various—to instruct the teachers in practical hygiene and physical culture, to superintend the sanitary and hygienic arrangements of the school, to regulate the games and athletic exercises, and thoroughly to overhaul each pupil once a month, drawing up a record of the physical development, of which record a duplicate should be sent to the child's parents with criticism and advice, and at the end of each year to award a prize to the child who has obtained the highest aggregate of marks at the monthly examinations. In addition to this the Board of Examiners should hold an annual examination at each centre, comprising tests of physical culture, and award medals and certificates to the best candidate. The scheme is thorough, it is worked out in detail, and, if applied, would certainly be of great benefit to the health of the populace. The chief objection to it is that the expenditure involved would be considerable, since it is stipulated that not only the medical attendant but also the members of the Board of Examiners should be liberally paid for their service. A simplified scheme upon these lines of regular physical examination of children, and providing a competitive interest, would undoubtedly be of great value if generally applied.

Petrol for Doctors.

MEDICAL men all over the kingdom have been suffering severely in regard to the supply of petrol for their motor-cars. It is not merely that the price has become high, but that there is an actual shortage of the article. Matters are bad enough in Great Britain, but they are much worse in Ireland. When the rising occurred in Easter week the military authorities at once commandeered the entire supply of petrol in the country, and traders were forbidden to sell any petrol to private customers. This measure was no doubt a necessary precaution at the moment, and we make no complaint of it. But although this restriction has now been removed, it is still impossible in many parts of Ireland to obtain any petrol. As a consequence many medical men in country districts find it impossible to travel the distances required of them for the performance of their duties, public and private. No section of the medical profession of the United Kingdom has responded more willingly to the call to service in the Army than the country doctors of Ireland, and the absence of so many has entailed a greatly increased mileage on their neighbours. Without an adequate supply of petrol it is impossible for the medical practice of the country to be carried on. The personal hardship on medical owners of cars is also to be considered; we know of one who has to pay high taxes on two cars and a motor-cycle, none of which he can take out of his garage. We hold that it is a plain duty for the Government, if the national supply of petrol is short, to prohibit its use for other than professional and business purposes. The burning of petrol for pleasure is, at the present moment, a national crime. The fine lady who takes her joy-drive of a fine afternoon is depriving the poor woman in the country cabin of the medical attendance she requires in her hour of suffering. It is for the Government authorities to put an end to this iniquity.

Malignant Scarlatina.

WE observe that Professor Hutinel, of the Paris Academy of Medicine, has lately given a very interesting account of his experience in this variety of scarlet fever. The malignant forms of scarlatina are of especial interest since the profession has become possessed of that extremely useful drug—adrenalin. During the year 1912-13, out of 417 cases of scarlet fever, 34 of which were of a malignant form, only nine ended fatally, whereas

in the preceding years 833 cases presented a mortality of 37 only. This means that the new treatment reduced the mortality by exactly 50 per cent. The malignant forms of scarlet fever may develop under various conditions, but in a general way they are more frequent in debilitated subjects. The elements for diagnosis are the following:—The rash is very intense, of a violet hue, and lasts longer than in ordinary cases. Besides the rash, there is an infectious erythema, occurring most frequently on the knees, elbows and buttocks. Sergent's "white line" is nearly always present; sometimes there is a brownish pigmentation. Asthenia is often observed. The temperature attains 106°, and may be even higher. Death may take place before the appearance of the rash.

Watering the Streets.

In the stress of war, strange deeds are committed in the name of economy. The medical profession cannot but wonder at the type of mind which evolves some of the ideas already acted upon. The withdrawal of the grant for scientific research, the wiping out of factory surgeons' accident reports, the shilling measles notification, are all samples of the strenuous labour of the colossal official brain. We venture to think, however, that no proposal yet put forward shows greater shortsightedness or will work more havoc, than the suggestion referred to in our columns this week by "Sinapis" that during the coming summer the streets of London should not be watered and washed. The daily press teems with reports of meetings directed to the saving of infant life, yet it is no exaggeration to say that death will reap a rich harvest during the next few months if this monstrous proposal is put in force. The medical profession in this country is at present sadly depleted. It is difficult to cope with civilian practice, and it is the duty of the municipal authorities and of the Local Government Board to assist the profession in its untiring efforts to promote the health of the community. Dust is a fertile source of disease, carrying the germs of virulent infections. Dust must be combated. The streets must be watered. The driving of a watering cart is not a skilled occupation. Women, men beyond military age, convalescent discharged soldiers—any one of these could without difficulty undertake the duty. To leave the streets of London for months unwatered and unwashed is as sure a way of murdering children—and adults—as a British bayonet is of killing Huns.

Limited Enrolments in Medical Schools.

The *Journal of the American Medical Association* gives some interesting details regarding the movement now in progress to limit the number of students enrolled in any one year by medical schools in the United States.

The Trustees of the University of Pennsylvania voted recently to limit the enrolment in the first and second year classes of the medical school to 100 students each. This is the fifth medical school in the United States to take action limiting its enrolment. Four years ago the Medical Department of Johns Hopkins University led the van by limiting the enrolment in its classes to ninety students each. Two years ago the Leland Stanford Junior University, School of Medicine, fixed the number at about twenty-five students in each class. Last year Rush Medical College fixed the limit at 100 students each in the first and second year classes and 120 students each in the third and fourth year classes. At the University of Minnesota the enrolment in the freshman class of the medical school has been limited to eighty students. This action was taken by each of these medical schools in the belief that the limit fixed represented the largest number of students compatable with the most satisfactory medical training that could be furnished with the present organisation of its faculty and the capacity of its laboratories. A certain amount of individual instruction is necessary for the best results in medical teaching, and very few students are able to dispense with such individual attention if they are to attain a high degree of proficiency. The conclusion is that large classes lowers the standard of teaching for all students enrolled. If it become necessary to make provision for larger numbers of students, enlarged teaching facilities must be provided, preferably by establishing an additional teaching unit having its own faculty, laboratories, equipment and hospital facilities.

PERSONAL.

Mr. D'Arcy Power has been elected President of the Medical Society of London.

Dr. Ernest Clarke will deliver a lecture on "Eyesight and the War" at the Royal Institution on June 9th.

The Society of Apothecaries of London (the Apothecaries' Company) has appointed Mr. Arthur Bingham Watson, of the firm of Messrs. Watson, Sons, and Room, of 12 Bouverie Street, E.C., to be Clerk to the Company.

The Board of Trinity College has confirmed the nomination of Mr. E. H. Taylor, F.R.C.S., to the Regius Chair of Surgery in room of the late Sir C. Ball. Professor Taylor has been for the past nine years Professor of Surgery in Trinity College.

The Bathgate Memorial Prize of the Royal College of Surgeons, Edinburgh, consisting of bronze medal and microscope, has been awarded, after a competitive examination in Materia Medica, to Miss Marguerite R. Stirling, and the Ivison Macadam Prize in Chemistry to Miss Janet Grant.

Dr. Wm. Hanna, Assistant Port Medical Officer, Liverpool, has been awarded the Henry Saxon Snell Prize of fifty guineas and the silver medal of the Royal Sanitary Institute, for his essay under the competitive title of "Suggestions for Improvements in the Sanitary Arrangements and Appliances on Board Ship."

Dr. Vincent J. Glover, M.D., who has been appointed medical officer of health and school medical officer for Waterloo and Seaforth, was a student of the former University College, Liverpool. He did pioneer work on the housefly as the carrying agent of the infection of infantile diarrhœa, which was the subject of his M.D. thesis. He also holds the appointment of hon. surgeon, Waterloo and District Hospital, Hotel Dieu, and police surgeon to the Seaforth and Aintree County Division.

Professor Sir George Hare Philipson, M.D., F.R.C.P., of Newcastle, celebrated the attainment of his four score years on May 18th. Sir George's name is known far beyond the borders of Tyneside, and his work in connection with the Royal Infirmary, Newcastle, and Durham University has earned him the gratitude of the public generally. Sir George Philipson has received many honours—in 1893 President of the British Medical Association, Bradshaw Lecturer in 1884, Vice-Chancellor of Durham University 1912, President of the University College of Medicine, Newcastle, and a professor of medicine since 1876: a president of, and consulting physician to, the Newcastle Royal Infirmary; member of the General Medical Council, and a magistrate. He was knighted in 1900. His many friends will wish him further long years of usefulness and activity.

FRENCH CLINICAL LECTURE

ON

POSTERIOR FRICTION SOUNDS, ASSOCIATED WITH LARGE EFFUSION, IN THE PERICARDITIS OF BRIGHT'S DISEASE.*

By PROFESSOR CHAUFFARD,

Of Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

THE diagnosis of pericardial effusion, which was formerly very uncertain, has become much more definite since the introduction of radioscopy. Pericarditis is still, however, a condition which is full of surprises, and its clinical signs demand a very close vigilance indeed. Friction of the most intense description may exist side by side with well-marked effusion. Moreover, the area over which friction sounds are perceptible is sometimes very large, involving regions where it is not customary to find, or for that matter to seek, them. These points are well illustrated by a case which recently came under my observation.

The patient, L., a young man, æt. 21, without pathological antecedents and with no signs of congenital syphilis, in May, 1915, developed bronchitis. There was albuminuria, slight dyspnœa after effort, vague precordial pain, and slight œdema of the lower limbs. During May, June and July the general condition remained practically unchanged, though the vision became impaired. In August there was a sudden increase in the anasarca and the visual disturbance became more pronounced. The patient visited the Quinze-Vingts Hospital, where his case was described as double albuminuric retinitis. He was put on to an exclusive milk diet, which did not, however, ameliorate his condition. The oppression and the precordial pain became worse, and there was insomnia, anorexia, and vomiting. He again went to the Quinze-Vingts, and, on November 1st, was from there sent as an in-patient to the medical clinic of Saint-Antoine.

At the time of his admittance, L. was pale in appearance, very oppressed, and compelled to adopt a sitting posture in bed; there was slight œdema of the lower limbs, the face was puffy, there was serous conjunctival chemosis, and almost total blindness. The urine contained 2.10 g. albumin to the litre, and the serum 1.72 g. urea in 1,000. Examination of the heart showed considerable extension of the area of dulness, and, on auscultation, a double pericardial friction-sound was observed. This was very marked—see-saw, almost staccato in character. It extended over the entire area of cardiac dulness, and at the level of the apex and above it the sound resembled the creaking of new leather. Pain was produced by pressure upon the diaphragm, especially on the left side. T.A. = 15/10.

In spite of venesection and liberal cupping, the sense of oppression and the pain in the precordial region continued for some days. The intensity of the pericardial sounds remained the same. On November 4th, an X-ray examination, to which I shall refer again later, was made, and I decided to puncture the pericardium. The puncture was performed on the following day by Marfan's method, by way of the epigastrium, 1,100 c.cm. of a lemon-coloured liquid, slightly hæmorrhagic in character, being withdrawn without difficulty.

The patient appeared to be very much relieved by the puncture. He fell asleep two hours afterwards and seemed to be less oppressed. He also somewhat recovered his vision, the T.A. rising from 13/10 before the puncture to 15/12 after it.

The improvement, unfortunately, was only transitory. The azotæmia became worse, and rose to 2.90 g. From November 8th the precordial pain returned; it was paroxysmal and agonising in character. Insomnia was complete.

On November 12th a second puncture was performed, and 350 c.cm. of fluid were withdrawn. This liquid was more hæmorrhagic than the first, and its evacuation was followed by amelioration of very brief duration. During the entire period, the intensity of the friction-sounds remained the same, and on no occasion were they observed to be absent.

On the 14th, the agonising constrictive precordial pain became atrocious, and was relieved only by the injection of 5 mg. morphine. It was impossible to place the patient in a position which eased him, and during the night he died.

This unhappy clinical history is characterised by certain very interesting features.

In the first place, the autopsy showed that the chronic nephritis, although of uncertain origin, was of ancient date. The kidneys were granular and atrophied. The heart was of the type characteristic of chronic granular nephritis. It was enormously enlarged, and weighed 650 g.; there was no valvular lesion, but the wall of the left ventricle was very much hypertrophied, its thickness being over 4 cm. There was hypertrophy of the suprarenals, each of which weighed 17 g.

Under conditions such as these, the appearance of the terminal pericarditis is not to be wondered at. It developed, in accordance with the law laid down by MM. Widal and Weill, at the moment when azotæmia was at its height.

Three important clinical factors in connection with the case deserve closer consideration. They are: the X-ray examination, the seat and the characteristics of the pericardial effusion, and the epigastric method of puncture.

X-ray examination is practically essential to the formation of a diagnosis in pericardial effusion. As carried out in this instance by M. Gauducheau, it yielded results of very precise diagnostic value.

The area of the cardio-pericardial shadow was considerably enlarged. It was bulbous in shape, the superior portion narrowing into a thin pedicle of irregular outline. The right edge of the shadow was convex, the left was nearly horizontal and, along a large proportion of its length, it touched the external edge of the thoracic wall. The most interesting thing about the shadow, however, was its immobility, pulsation of its edges being nowhere perceptible. This combination of characteristics corresponds to the type first formulated by MM. Vaquez and Bordet (1). It is absolutely specific, and is certain evidence of large effusion in the pericardial region.

In the present case there was yet another feature of interest. The amelioration brought about by the puncture was so marked that I was able to submit

* A communication to the French Academy of Medicine, January 11th, 1916.

the patient to a second radioscopic examination seven hours after the first. The modification in the cardio-pericardial image after the withdrawal of 1,100 c.cm. of fluid—an enormous volume—was very striking. While remaining typically the same, the image showed two well-marked modifications: the right edge of the shadow was less swollen and was more nearly vertical; the left edge was separated from the thoracic wall, and the apex of the heart was visible. More important still, the cardiac contractions were clearly perceptible. But the area covered by the cardiac shadow was still abnormally large, pointing to considerable enlargement of the heart. This was confirmed by *post-mortem* examination, which revealed hypertrophy of the left ventricle in a heart weighing 650 g.

Unless skiagrams had been taken, I should have hesitated to affirm the presence of considerable effusion; still more should I have hesitated to puncture it. Auscultation invariably showed a continued and very intense friction over the whole of the precordial region. It was superficial and in no sense dulled, and suggested extensive dry pericarditis. Yet the serous sac contained at that time more than a litre of fluid. This point is one of exceptional interest, and suggests that pericarditis with friction may very frequently be accompanied by effusion. It is evident, then, that a diagnosis based on the assumption that the presence of friction precludes the presence of liquid would be liable to grave chances of error.

Without the aid of skiagrams, puncture would have been neither practicable nor permissible. Its performance was further justified by the employment of the new epigastric method introduced by M. Marfan, to which I shall return later. To puncture from the front, with a friction area which included the entire surface of the heart, would have seemed much too risky an undertaking.

In addition to its exceptional intensity, the pericardial friction in this case was characterised by certain very remarkable features. It was not only precordial, it was also axillary and dorsal.

It has always been said that pericardial friction-sounds are not transmitted; that, in the well-known phrase of Jaccoud, they are confined to the area of inception. But it is evident that this is not invariably the case, and dorsal friction-sounds must to-day be included in the symptom-complex of pericarditis.

The cases of dorsal pericardial friction which have up to now been described in France do not, I believe, number more than eight. Almost all have been observed in the province of Lyons, and are included in two papers by MM. Devic and J. de Teyssier (2) and M. Pauly (3) respectively. These authors give a more or less detailed description of the posterior pericardial friction in all their cases, and it is noticeable that the same descriptive phrase is almost invariably employed—namely, that the friction-sounds may be heard "even dorsally." In a case given by Devic and Teyssier the description is a little more detailed. They say: "The friction-sounds were audible over the left side of the thorax and on the left side at the back. The dorsal sounds seemed more intense than those in the thorax."

In the case of the patient L., this sign was of the clearest possible description. I observed it for the first time on the day after the withdrawal of the 1,100 c.cm. of fluid. Was it there before, and had I failed to perceive it? This is possible, for a student has since told me that he had noticed it from the time of the patient's admission. Yet, more than once, I ausculted dorsally in order to discover the possible existence of pleural or pseudo-pleural symptoms. These were absent, and I did not observe any signs of dorsal friction until after the first puncture. Then they were unmistakable and typical in character. The friction was see-saw in character; it was persistent when respiration was suspended; it possessed absolutely the same characteristics as the frontal friction, but was less intense. Its zone was readily defined. Vertically, it reached from the third to the eighth vertebra; tranversely, it extended beyond the median line and was continued, though rather more attenuated, to about 15 cm. to the right of the ridge of the spine. This transverse band of friction extended beyond the axillary line and became merged in the area of precordial friction. There was thus a kind of half-belt of typical pericardial friction-sounds which extended from beyond the right edge of the sternum in front and terminated on the right of the ridge of the spine at the back.

The friction over this area was perceptible from the first moment of its discovery until the end. At the time when the second puncture was performed, there was friction over the entire pericardium, both back and front.

What is the clinical significance of this abnormal area of friction, of which the present instance is the most perfect which has up to now been described?

First of all, let us consider the extremely variable results yielded by left dorsal auscultation in pericarditis. With the exception of a slight roughness in respiration at the base of the left lung there are, in the majority of cases, no abnormal signs. It is certain that at the level of the heart friction similar to that in front is present at the back, but it is not perceptible by auscultation. The friction is deep-seated, and the sounds are deadened by a thick layer of supple and aerated pulmonary tissue. In other cases, the signs observed are provoked by a co-existent left pleuritic effusion. Where no pleurisy is present, pseudo-pleuritic signs are sometimes observed. This constitutes Pins' syndrome, and seems to point to considerable compression of the inferior left lobe. There are, finally, those somewhat rare cases in which dorsal friction becomes apparent upon suspension of respiration. (It is well to point out here that no diagnosis of pleural sounds is possible unless the patient is made to hold his breath.) These cases, which include that of the patient L., correspond to marked compression of the left lung occurring under conditions which may be defined as follows:—

In all the descriptions of cases of this class which have been published one fact stands out very clearly. In every instance except one, cited by Bouillaud, there was a close resemblance between the symptoms and those of the pericarditis of Bright's disease. In Bouillaud's case there was valvular lesion of rheumatic origin, with a hypertrophied heart weighing 652 g. Cardiac hypertrophy is the rule in Bright's disease, the heart weighing as much as 450, 530, 580, or even, as in the case of the patient L., 650 g.

Dorsal pericardial friction, the outcome of an enormously enlarged renal heart, appears to be almost specific in the terminal pericarditis of Bright's disease. I am of the opinion—and my conclusions coincide with those of Dr. Pauly—that the friction-sounds are not transmitted from the front to the back. It is not the precordial friction which is heard in the back, but a friction between the posterior surface of the heart and the posterior parietal layer of the serous membrane. This may be regarded as the distinctive characteristic of posterior pericarditis, the frequence and the clinical significance of which have been shown in a recent monograph by M. Cassaët (4). In the case of the patient L., the *post-mortem* showed the lesions typical of extensive diffuse pericarditis, together

with a fibrinous exudation of the bread-and-butter character almost equally distributed over the entire surface of the heart.

According to M. Pauly, the presence of large pericardial effusion in itself facilitates the detection of posterior friction; the base of the left lung becomes collapsed, and the pericardial sac, enormously distended by fluid, comes into contact with the posterior thoracic wall.

The autopsy showed that all these anatomical conditions were present in the case of the patient L. There was considerable effusion in the pericardium; there was compression of the left lung, which was flattened against the thoracic wall and hollowed into a kind of deep cell with thin walls of pulmonary substance, into which the enormous mass of the heart and its envelopes was fitted.

Such is the pathogeny of these rare cases of posterior pericardial friction. It must be borne in mind, however, that the area over which the sounds are perceptible does not entirely correspond with the projection of the pericardium against the dorsal wall. To a certain extent the friction sounds are transmitted, and of this I was able to obtain proof. Between the first and second puncture I was able, by means of skiagrams, to define the superior edge of the pericardial contour and to trace its position upon the patient's skin. It was obvious from the position of these that friction sounds were perceptible well above the area of contact between the pericardium and the thoracic wall.

It is evident, then, that pericardial friction-sounds are not confined to the friction area; they are transmitted in a greater or less degree according to the prevailing anatomical conditions. A collapsed and flattened left lung must necessarily favour the transmission of the morbid sounds.

The method of pericardial puncture which I employed in the case of the patient L. possesses technical advantages which are of no small therapeutic significance. To puncture a pericardium is always an anxious business. In the first place, the indications for such a procedure are very rare; in the second the close proximity of the heart is bound to give rise to a certain measure of apprehension. By the introduction of the epigastric method, M. Marfan (5) has rendered an invaluable service to the medical profession. It is now possible by a perfectly safe and comparatively easy method to tap the effusion at the point where it accumulates in the most dependent portion of the serous membrane. I had never seen Marfan's puncture performed, yet I was able twice to puncture the pericardium, in the certain knowledge that I should penetrate neither the internal mammary artery not the pleura, and with every chance of escaping the cardiac wall.

The *technique* of the method is of the simplest description. The patient is placed in a semi-sitting posture and supported by cushions. The site of puncture is on the median line below the apex of the ensiform cartilage, which serves as guide. The trocar is inserted from below and directed upwards, following the posterior face of the ensiform cartilage and sternum so closely as almost to touch it. The distance from the surface to the pericardium is, in adults, about 6 cm. As the liquid is evacuated, the patient is slowly raised, in such a manner as to allow the fluid to collect in front and below at the level of the point of the trocar. It is advisable that the puncture should be preceded by subcutaneous injection of spartein or camphorated oil. This is a precaution which I invariably adopt before puncturing a thorax.

In my judgment, Marfan's epigastric puncture marks a distinct advance in *technique*, and I do not doubt that the method is destined to supersede all others. Owing to the toxæmia by which it is accompanied, a temporary relief, such as that afforded the patient L., is the best that can be hoped for in the pericarditis of Bright's disease. In other pericardial effusions, where the general condition is less grave, the method would undoubtedly prove of great therapeutic efficacy.

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ORIGINAL PAPERS.

SOME OBSERVATIONS UPON THE ENDOCRINIC GLANDS.

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THE place which those glands possessing internal secretions now occupy in the practice of medicine cannot be over-estimated. Although it is only in recent years that their importance has been understood, every day brings to our knowledge fresh evidence of their vital influences upon the general bodily and mental health. When it was discovered that exophthalmic goitre owed its existence to an over-action, associated with hyper-secretion, of the thyroid gland, the first milestone had been passed in the path which led us to the discovery of the important part which the hormones play in our lives.

What we may call the grosser lesions due to disturbances in the normal ratio between the various internal secretory glands, are nowadays matters of almost popular knowledge. What we desire to emphasise in this article are the smaller signs and symptoms which, to the eye trained to observe, show minor disturbances, either of one or more glands, or of the balance between these glands. Many of these details, trifling in themselves, have been proved to be sufficiently characteristic to justify medical science in including them among the constant features which owe their origin to the ductless glands. When the pioneer work was being done on this subject, the evidences of the slighter disturbances of the endocrinic glands were regarded by many observers as too fanciful to merit serious consideration. Thus, when Levi and Rothschild first pointed to the "eyebrow" sign as indicative of deficient thyroidism, it was hard for many students of these matters to convince themselves that this sign was of any value whatsoever.

Nevertheless, this and other manifestations of equally slight nature are now admitted to be of the greatest value in diagnosing deficient thyroid secretion. Many of the signs of kindred nature are so slender as to require the most minute study and the most careful observation before we can say, with any degree of probability, which particular gland is at fault. The importance of this lies in the fact that many cases of "functional disturbances," which we have been content previously to cosset with various preparations, and to class as neurotic or neurasthenic, according to the depths of our

ignorance, are now plainly due to abnormal functioning of the endocrinic glands. This much is now generally known and universally admitted. Only relatively few observers recognise that this is not the *fons et origo mali*, but only one stage on the journey.

To take a concrete instance, let us suppose that a patient exhibits signs that the thyroid is not functioning adequately. The patient exhibits many of the well-known signs pointing to this deficiency. Most of us are well content to leave it at that, and even to spend time (which should be occupied in delving still further and asking ourselves why such a deficiency is present), on self-adulation at our extraordinary deductive powers. It is certainly true that we can benefit our patients by the exhibition of one or other of the organo-therapeutic products, but we shall do so to a much larger extent if we realise one or two simple facts.

When advising a patient to take, let us say, thyroid extract for a time, we are constantly asked by the patient the *rationale* of such a prescription. Having explained that we have reason to believe that this gland is not supplying an adequate amount of secretion, on more than one occasion we have been asked by the logical patient, "Have I got to continue this medicine for the rest of my life?" or "Will the need for its administration be overcome in due time?" This is an important matter, because it makes us think for ourselves, and not blindly prescribe drugs for indefinite times without reasoning as to their method and length of administration.

I think that we are justified in considering for a few moments what underlies the deficiency in secretion. It is highly improbable that one or other of the endocrinic glands would suddenly and without any stimulus refrain from supplying, or determine to over-supply, its valuable contents to the blood-stream. It is much more probable that some cause, be it mental or bodily, has determined this upset, and it behoves us to realise that this is the case, and not to consider our diagnosis completed when we have made up our mind that such and such a gland is defective or over-active.

In his book on "Intestinal Stasis," Lane states that one of the effects of intestinal intoxication is atrophy of the thyroid. Here we have a definite attempt to go to the root of the trouble, although unfortunately there is little evidence at present for this statement. For the present, at any rate, therefore, let us assume that this is one of the causes which underlies sub-myxœdema. What others may there possibly be? Among the causes of diabetes which find their place in most current textbooks on medicine is worry and anxiety. Now, this is at once assuming that mental causes may upset a bodily function or functions, and thereby disorganise metabolism. And the writer of this article would be the last to wish to deny this. If, therefore, we may assent to this detail of ætiology with regard to diabetes, why should we not include such a cause when we are discussing disorganisation of the endocrinic glands? Many cases which we can call to mind at the moment afford us the strongest possible support for such a theory. Prolonged anxiety, business worry, a sudden shock, are said to be capable of producing diabetes, just as puncture of the floor of the fourth ventricle is, experimentally, capable of doing the same. It would seem at least equally probable that the same causes can, and do, upset the mechanism which governs the balance between the ductless glands.

In the severe cases of this nature (*e.g.*, Graves' disease), this fact is sufficiently recognised. But is it—has it been—when we come to consider slighter derangements of these important glands? It is obvious that the entire study of this subject is of too recent a date to have made the minute clinical study of the ultimate cause a feasible proposition. Nevertheless, we now come to the time when our patients ask us the why and the wherefore of such prescribing.

We have suggested two possible causes which may underlie the disorganisation of the endocrinic system—namely, intestinal toxæmia (as suggested by Lane), and mental causes, such as worry, anxiety, and mental strain of any kind. But are these the sole causes which may be held responsible? We are all familiar with the damaged health which may result from a long illness, or, alternatively, from a sudden short attack, such as influenza. The patient recovers but slowly, the strength returns not, the mind is clouded, and in countless other ways the individual shows the effects of the illness. Hitherto, we have referred to such cases as post-influenzal debility, when this disease has been at the root of the trouble, or as "neurasthenia" when we could not find a cause, even as tangible as influenza. Our remedies have been confined, certainly in many instances, to a change to the sea or spa, and a generous addition to the diet. But we have rarely asked ourselves what factor underlies these "delayed recoveries."

Why should not the toxins of influenza, in like manner to the toxins generated by the inhabitants of the bowel, or the adverse mental influences which exert their harmful action where mental strain is present, be capable of producing an endocrinic disorganisation? Hypothetically, at any rate, such an occurrence is at least probable; and it would give us a reason for the sudden or gradual withdrawal of the internal secretion which happens to be deficient in the particular case.

From the practical standpoint, moreover, we must advance some such hypothesis as this, in order to account for the train of symptoms, which, certainly in many cases, owes its origin to a disturbance of the normal ratio which exists in health between the various endocrinic glands. Again, most of us are familiar with the cases of delayed convalescence following an operation. The patient invariably presents a similar picture to that designated "post-influenzal debility." In theory, at any rate, he ought to respond to the administration of one or other of the preparations of the hormones, and in many cases he does.

On more than one occasion I have had the opportunity of putting this theory into practice. One lady consulted me some years ago for neurasthenia following a severe abdominal operation. This condition had resisted a wealth of treatment; many and diverse remedies had been tried without relief. I hoped that I might be enabled to afford relief by the administration of an organo-therapeutic preparation. On considering her syndrome, I came to the conclusion that she might derive benefit from the exhibition of pituitary extract. In spite of the laboratory evidence which should convince us that it is useless to give an extract of this gland by the mouth, I took my courage in both hands and prescribed it. The result surpassed even my optimistic expectations. The lady recovered her strength and health; her digestion righted itself; her functions became normal, and she regained perfect health. This result is striking, for it followed many other remedies, and the patient herself always refers to this medicine as the "magic mixture."

I mention this case, as it exemplifies our hypothesis that many and diverse causes may produce a change in the normal functioning of these glands. Whether, in this particular case, it was the shock of the operation, the anæsthetic, or the changes in diet necessitated by these procedures, it is impossible to say. Another example of a similar attack

of "thyroid deficiency" is the case of a lady who, having nursed her husband through a long and trying illness, which resulted fatally, consulted me for symptoms which, upon investigation, were shown to be due to deficient thyroid secretion. Upon the administration of thyroid extract, she made a capital recovery and was restored to health.

These cases both help us to answer the question so often put to us when we recommend an extract of one or other of the ductless glands. It would seem that, certainly in many instances, the administration of the extract either by the mouth or hypodermically, serves to act as a stimulus to the normal secretion, so that it is unnecessary to continue artificially its administration for lengthy periods. But, again, the prescribing of the requisite extract at the right time is the "shortest cut" to health which exists.

It is even possible that many of the benefits which we all recognise to accrue from a change of climate, from a course of spa treatment, or from a sea voyage, are really largely efficacious because they stimulate into activity the gland (or glands) which has been temporarily inhibited by the illness, operation, or other cause. In this connection, we may refer to another instance where "post-influenzal debility" has yielded to organo-therapy. A lady consulted with me for this condition, which had been in existence for five years, and which had resisted all treatment. It had commenced after a bad attack of influenza, five years before. Her condition was much improved from the first by the administration of thyroid extract, and she made a most satisfactory recovery.

The point which seems to need emphasising is this: that prolonged illness, shock, mental anxiety, and many other causes produce effects which owe their origin to a disturbance of the relation between the hormones. The indications are rarely broad; Sometimes they require the eye of a medical "detective" before their significance is realised. But signs and symptoms are rarely wanting if they are looked for.

Neurasthenia has been likened to influenza (inasmuch as any intangible condition has received this label), and has been dubbed the "dustbin of the neurologist." Nevertheless, it is a real and concrete disease—concrete in the sense that it is not a hotch-potch of other diseases. Doubtless some of the diagnoses which have been made under this name, would in reality have received another title did we but realise what was the underlying pathology. Some patients who have been called neurasthenics, are in reality neurasthenics, but they are neurasthenics because they are suffering from a deficiency of hormones

I may perhaps be allowed to mention one other case, as illustrating the relation between neurasthenia and the endocrinic glands. During the course of last year I was consulted by a doctor, who informed me that he was a neurasthenic, and brought me a type-written account of his symptoms in support of this statement. I need not describe the case in detail, as the few points I mention will serve our purpose.

The patient complained that he was slow mentally, became extremely tired after comparatively small exertion, was exhausted after sexual connection, unable to concentrate for any length of time, and so on. On examination, I discovered a very slow pulse (barely 50 to the minute), a dry and rough skin, prematurely grey hair, especially over the temples (the patient was in the thirties), trophic changes in the skin appendages, and many other minor signs, which I will not waste time by enumerating. Suffice it to say, that the patient presented a typical picture of sub-myxœdema, and I advised small doses of thyroid. Some months later he advised me that he had suffered from some "extraordinary sinking feelings" when he had taken the thyroid, and in consequence had been forced to abandon it. I explained that these were most certainly due to the stimulating effect which the thyroid would produce upon the circulation, and I encouraged him to persevere with it. The interest of this case lies in the fact that all the symptoms had gradually supervened after an attack of influenza, and that their real nature had never been diagnosed.

Such a case as this will serve to show how a certain proportion of patients who have been treated, and only too frequently dismissed as incurable under some such name as neurasthenia, may be helped by the judicious administration of these extracts.

I need not offer an account of the symptoms which make up these diseases, nor is there need for me to describe in detail what is so well known about individual symptoms of deficiency in thyroid, in pituitary, or in adrenals. But one or two points have come to my notice about these conditions that I should like to mention in passing.

There can be little doubt that deficiency in thyroid secretion comes on more or less suddenly in some cases. I recall the case of a young male subject, who developed this complaint after a hazardous season on the Stock Exchange. His condition, when he came under my observation, was typical, and he made speedy progress under thyroid medication. Again, I have seen a typical attack of sub-myxœdema develop after one of the exanthemata; likewise excessive thyroid secretion ensue after such a disease as rheumatism. The treatment of this latter condition resolves itself into the administration of extract of the pituitary or adrenal gland, combined with other remedies which tend to counteract the excessive secretion, such as rest, calcium salts, glycerophosphates, etc.

It may be of interest to note at this place the extraordinary intolerance to tobacco which develops when the thyroid secretion is deficient. I have, on several occasions, observed that the patient, a heavy smoker previously, has had to abandon the fragrant weed, at or about the time when he commenced his illness. I have been told that even one cigarette is followed by unpleasant sensations; and I have ascertained that blood-pressure has been lowered as much as ten points after one cigarette.

These occurrences all point to the fact that, given suitable conditions, it is not a difficult matter to upset the normal ratio between the various hormones. It is necessary in these cases to study the antecedent conditions with as much care as we should when taking the previous history of, let us say, a case of tuberculosis. For in these patients we can often discover some occurrence which may well have some bearing upon the ætiology, and may give us valuable information both as to the actual cause, and as to the particular gland at fault.

Unfortunately, the therapeutics of the other glands are scarcely in such a satisfactory state as that of the thyroid gland; and we do not, in practice, obtain results as striking as those which so often ensue from the administration of thyroid. But, before leaving the subject, we may say a few words as to the prescribing of the adrenals.

The extract of the adrenals may be given in the form of dry extract, and it is often of great benefit to those patients who are weakly, debilitated, with a low blood-pressure, and constant fatigue. These are the cases of neurasthenia in which this extract should be tried. Again, the preparations of one or other part of the pituitary gland are in some of these cases more beneficial; while it is sometimes of

service to use what Leonard Williams calls a "mitrailleuse"—*i.e.*, a preparation containing the extracts of many glands. Such a one is Hormotone, and it is claimed that its exhibition is followed by marked benefit in many indefinite conditions.

The method of treating disease by means of extracts of the endocrinic glands is, relatively, still in its infancy, so we must not be hypercritical at that part of this medication, which works without the support of the laboratory. But, as has been admitted elsewhere by a physiological chemist, clinical experience often is at variance with laboratory results, and clinical results are not always in the wrong. However much we may condemn the indiscriminate and speculative use of these extracts without adequate reasoning, if we abide by laboratory results, and never test these by practical endeavour, we are liable to remain with little added knowledge on these subjects as the years roll on.

The practitioner must perforce use his eyes before he prescribes thyroid extract; he must be familiar with the small signs which go to make up the picture of deficient or excessive action of this gland; but he must not hesitate to prescribe this substance, although the signs are slight. But if he must be familiar with the diagnostic features, he must be equally *au fait* with what is now known as to rational treatment. He must choose a carefully standardised preparation, he must be careful that his preparation is new and not several months older than when the local chemist purchased it from the wholesale house; and, finally, he must understand that the dose is a matter deserving the closest attention. Thyroid, to quote one example, is not a drug to use from three to ten grains, but in fractions of a grain, certainly to commence with. Had it not been for the fact that it has been utilised to reduce weight, the probability is that it would not have obtained that popularity which it now possesses in the lay mind. This has made its administration a matter of danger, especially when we consider that the dose, or rather the initial dose, if often far too large.

Convalescence is often accompanied by deficiency in the thyroid gland, and its administration in minimal doses is of very real help. During the months which follow a serious illness, such as pneumonia, the administration of a "mitrailleuse" is frequently indicated.

To all those who treat neurasthenia, who have to lighten the lot of those unfortunate sufferers from what are known as "the functional neuroses," the importance of organo-therapy cannot well be overestimated. When administered with intelligence, with the patient under observation, there need be no risk in such prescribing. Rather is there a risk in prolonging a morbid condition owing to neglect in the faculty of observation or an oversight as to the underlying causation.

Again, what a difficult matter it is to "fatten up" some patients. Rest-cures, hyperalimentation, malt extracts, digestive ferments—all seem to be of no avail. But the extracts of the ductless glands will often be found of service, when taken with regularity.. It should, however, be remembered that thyroid must be prescribed with great care in such cases as these. Extracts of the brain and spinal cord, of the pancreas and liver, of the testes and seminal vesicles, are of much help. I have recently had under my care a man suffering from advanced neurasthenia, whose weight had dropped from eleven stone to between eight and nine. Under the administration of a mixed extract his weight is now (one month after the commencement of treatment) nearly ten and a half stone, although nothing had previously been able to stop the loss of weight.

In the *Practitioner* for January and February, 1915, will be found many able articles from the pens of experts on the subjects of the endocrinic glands. These articles discuss fully the available material both from the standpoint of the laboratory and the bedside. A perusal of these numbers will well repay the time occupied.

It is hoped that this article will succeed in pointing out some of the ways in which the hormones may be utilised, and a few of the morbid conditions in which they are indicated. That a great future lies in front of this method of treatment no one will doubt. But we may also express the hope, in conclusion, that the reason why changes in the normal relation of the hormones take place will be investigated fully, as well as the changes themselves. When we have more information as to the occasions on which we may expect this important system to be upset, then shall we have more definite information for our therapy.

A NOTE ON THE DISTRIBUTION OF CASES OF CEREBRO-SPINAL FEVER IN A MILITARY CAMP.*

By GEORGE E. NESBITT, M.D.Dubl., F.R.C.P.I., D.P.H.,

Assistant Physician to the House of Industry Hospitals, Dublin.

In a paper read before this Section in April, 1915 (Medical Press and Circular. May 19th, 1915), I drew attention to the difficulty in tracing the source of infection and the mode of spread of cerebro-spinal fever. With reference to an outbreak in the Dublin district in that year I remarked: "No connection whatever could be traced between any of these cases, no two of which happened in the same room, or even in the same block of buildings. The disease seemed to exhibit a curious perversity in emphasising this point."

Following the usual course, however, the epidemic died out towards last summer, and during the autumn and winter no cases were reported. In January of this year the disease reappeared in a large military camp. The first case occurred in a brick-built barracks at a considerable distance from the remaining cases who occupied huts erected last year. It was, apparently, a so-called sporadic case, and, except as a coincidence, had almost certainly no connection with the small epidemic which followed.

Though this epidemic numbers only nine cases, it exhibits certain features of interest, more particularly with reference to their curious distribution.

A plan of the camp shows that it consists of three separate divisions, two being adjacent, the other 600 yards distant, open grass land intervening. The shortest distance between the huts is 30 feet. The huts are designed to accommodate twenty-eight and thirty men, but the full number was seldom reached. There was no overcrowding, though the entire camp was occupied by about three thousand men. As a matter of fact, the only drawback to perfectly hygienic conditions was the sodden state of the ground surrounding the huts, due to the exceptionally heavy rainfall during the winter. I incline to the belief that this factor is important.

I have indicated on a diagram [not reproduced] the position of the huts where the cases occurred, numbered according to date of appearance. It should be noted that no two cases occupied the same or even adjacent huts, that the order of appearance is quite irregular, and that the cases are widely spread throughout the camp.

The first case developed on January 22nd in a

* Read before the Section of State Medicine in the Royal Academy of Medicine in Ireland on Friday, April 14th, 1916.

hut marked (1). Next day the second appeared two huts off. The third ten days' later in the distant section of the camp—*i.e.*, six hundred yards off. No. 4 next day jumped as far as possible in the opposite direction, followed by (5), eight days later, two huts distant. Two days after No. (6) appeared—back in the distant camp, but not near No. 3's hut. Then in five days No. (7) as far as possible from any of its immediate predecessors. Nos. (8) and (9) did not appear for a month after—a week and six or seven hundred yards between the two.

So far as could be ascertained these men were not in direct contact—in fact, they were unknown to each other previous to admission to hospital.

A careful examination of these data suggests that direct infection plays a very small part in the spread of the disease. Popular opinion would, in this respect, appear to be at fault. Proved cases are rather rare in the literature of the subject, and my own experience includes only one fairly certain example—a hospital resident.

Amongst the numerous suggested possibilities I would place the climatic factor first. Exactly how it operates is a matter for further investigation.

I must express my hearty thanks to Lieut. R. H. Cox, R.A.M.C., who has medical care of these troops, for much assistance in the investigation of the outbreak and for an excellent scale map from which my diagram is prepared.

The treatment in all cases was serum intrathecally, and of the nine four died.

CONCERNING RUBBER GLOVES.*

By ROBERT T. MORRIS, M.D.,
Professor of Surgery, New York Post-Graduate Medical School.

SOME years ago I published an article condemning the indiscriminate use of rubber gloves. This brought out favourable comment from a number of the older expert surgeons, and it called up a great deal of unfavourable criticism from men who had been trained to believe that rubber gloves should be employed in all operative surgical work. Perhaps it is now time for me to state clearly certain views which are the outcome of more extensive experience.

First, let us take up the matter of principles. According to the fundamental ideas of the third or pathological era of surgery, the operator was to remove bacteria and their products most thoroughly from any infected area. This called for a degree of technical work which represented progress, but nevertheless often proved injurious to the patient. Furthermore, it was frequently unnecessary. We are now passing into the fourth or physiological era of surgery.

The main idea about which our new methods are grouped consists in giving the patient the mildest attack of surgery which will suffice for turning the tide of battle between bacterium and organic cell. It is the idea of conserving the patient's energies and turning him over to himself as expeditiously as possible—in other words, giving him "home rule." Most surgeons cannot introduce their nicest manual *technique* when wearing gloves.

The methods of the fourth era of surgery include the idea of the least possible degree of handling of sentient tissues, and the shortest incisions which will suffice for accomplishing an object without jeopardising any of the patient's interests. Furthermore, rapid work is desirable in order to avoid sending prolonged destructive influence into the patient's centres of consciousness, which are never wholly asleep, no matter what degree of anæsthesia may be employed. Regarding this, Dr. T. L. Bennett says that the best surgeon is the one who acts all of the while as though he were afraid of waking the patient up.

In order to follow the principles of this fourth era of surgery, one needs to depend very largely upon the sense of touch. We have often to work by touch in a class of cases in which a phrase "expose all of the pathology" belongs to the third or pathological era of surgery, now passing. It is better not to expose all of the patient's pathology in many of these cases in which we already know what that pathology is, and what the patient will be able to do with his repair machinery if he is not shocked too deeply.

In some cases a large incision and tedious technical ideal work will allow many more bacteria to fall into a wound from the air than would be carried in by well-prepared surgical hands.

This matter of careful preparation of surgical hands is sometimes neglected by men who put too much confidence in their rubber gloves. I would not advocate any idea which jeopardised the patient's interests. On this basis I made at one time a quiet examination of hospital records of a number of surgeons who worked without gloves, and of a number who worked with gloves. Some of us who depend upon careful preparation of our hands had fewer cases of infection than were recorded against other operators who used rubber gloves in all of their operative work. In only one instance did a surgeon who wears rubber gloves continuously have better results than my own, and he is a better surgeon than I am, anyway.

For hand preparation I have depended for some years upon one of the chemical substances which does not coagulate albumin, and which leaves the skin of the hands soft, and free from that epithelial injury which follows the use of bichloride of mercury. There is doubtless a difference between hands of various surgeons in this respect. Hands which are continually moist, indicating some chronic toxic influence (chiefly from the colon, according to Lane) may carry more active colonies of latent bacteria in their epithelium than would be found in the epithelium of the hands of men in perfect health. We have laid too much stress upon the need for the employment of germicides in hand preparation, when a powerful antiseptic, not a germicide, might cause less injury to the protoplasm of the epithelium of the surgeon's hands.

The advantages of working by the sense of touch in preference to the sense of sight in certain cases has been recognised by surgeons since the earliest days of surgical history. The sense of touch is dulled by the best of gloves.

The operator in a case of perforated ulcer of the stomach, working by sense of touch, may introduce drains down to the region of perforation and complete his preliminary operation in three or four minutes of time, leaving subsequent details for a secondary operation.

In typhoid perforation, or in cases for drainage of the fluid belonging to parenteral anaerobes in typhoid hemorrhage, the entire operation from first incision to last suture may sometimes be done in seconds instead of minutes where one is working by the sense of touch.

When removing firmly adherent organs like oviducts in cases of pyosalpinx, or the appendix in acute infective cases, work may be done through short incisions by aid of the sense of touch very rapidly and accurately. Long incisions naturally predispose to the development of post-operative hernia, if the patient has the luck to live and face that danger.

For cases in which we need to be particular about

* *New York Medical Record*, March 4th, 1916.

scarring, one will often work to advantage through incisions which could not be employed if the sense of sight were our chief dependence.

On the other hand, rubber gloves may be worn to advantage in almost all of the so-called "external operations," such as amputations or excisions, or hernia, in fact I need not enumerate. Surgeons there be who are not well trained in the principles of asepsis or of antisepsis, yet who are doing a great deal of operating. For such operators I would prescribe the employment of rubber gloves under all circumstances.

The question of wearing rubber gloves was first brought forth actively at a time when I was most deeply engaged in forwarding the principles of the fourth era of surgery, and for that reason my stand against the indiscriminate use of gloves may have been made with more emphasis than would be placed upon the subject at the present time, when very thin flexible gloves are to be obtained from the manufacturers. Rubber gloves which were put upon the market at first were comparatively thick and cumbersome.

Excepting in abdominal work rubber gloves give a certain percentage of results in their favour, even with the most expert operators, provided that very thin gloves are used. Personally I prefer the ones which are made in such a way that the knuckles of the operator are left free, without the necessity for putting the rubber particularly upon the stretch over the knuckles. There is thus less interference with the sense of touch under these circumstances.

There is no need for bringing up the question of desirability of rubber gloves for use in obstetric work or in various examinations, or for protection of the surgeon in some fields of work in which the advantages are obvious.

Improvements in rubber gloves have been so marked that I do not now have the feeling that was engendered when I saw dangerously bungling work done by men who were wearing thick gloves. At that time it was evident that younger men who were being trained to wear gloves in all operative work would never develop the fine sense of touch belonging to the surgeons of a past school.

DOPE POISONING.

By F. BARLOW, L.R.C.S.E., L.R.C.P.E., L.R.F.P.S.Glas.

The term Dope Poisoning is given to a definite train of symptoms affecting those engaged continuously in the final manipulations on the canvas of aeroplane wings. In the early days before the nature of the agent, active in the production of this disorder, was appreciated, hoppers were erected above the part being doped. At present the rational method of ground-suction ventilation is proving much more efficacious, since this mode of action is based upon considerations of the essential physical characteristics of the noxious agent to be dispersed. Undoubtedly in some of the cases seen, a certain part of the symptoms, especially in young girls, is of an hysterical-autosuggested type, probably induced by the constant dread of this affection and the fact that they see fellow-workers, with whom they are daily in close association, continually falling out owing to this complaint. A vicious circle is thus very soon established unless from the very outset the matter is dealt with in a firm and skilful manner by the medical officer in charge. Discrimination between these pseudo poisonings and the true cases of Dope intoxication, also the detection of those other cases in which there is a certain element of poisoning overshadowed by subjectively exaggerated symptoms, and to allot to each its true proportion in the special diagnosis of the case under consideration, may present great difficulty until the patient has been under observation for some time.

As a rule, the first complaint by a patient, that would direct suspicion of the case being one of Dope Poisoning, is a persistent pain in the back. This is aggravated by exertion or standing, and but slightly relieved by rest. The pain is usually worse in the day, progressing in intensity throughout the working hours, until towards the evening these patients have to interrupt their work at frequent intervals to rest. On examining the painful area of the back, it is found to coincide roughly with Morris' quadrilateral. There is no pain on light palpation, but deep pressure or dipping the fingers produces sharp lancinating pain. Examination of the abdomen and pressure in the hypochondriac and epigastric region generally shows nothing abnormal. Coincident with the onset of this pain in the back observant patients will state that they noticed the urine assume a darker hue progressing to a deep orange shade. If a specimen is examined at this stage albumin will usually be detected, and in many cases the Hæmoglobin test (Guaiac and Ozonic Ether test) falls out positive.

Jaundice is also an early and progressing feature, but is, as a rule, of such gradual onset that it is the friends of the patient who first notice it.

Constipation, less noticed by women workers, probably because with them this state amounts in many instances almost to a physiological condition, is an early and troublesome feature. Additional symptoms which gain importance by their aggregation are: nausea or even vomiting, often complained of after the first few weeks of work, vague abdominal pain, vertigo, tachycardia, breathlessness and a general feeling of malaise. If these workers are transferred from Dope work at this stage and given employment which does not bring them into contact with any of the doping process or dope workers, all symptoms usually rapidly subside.

Almost all the dope workers say that their mouth or throat feel dry and sticky, and complain of a persistent taste which they compare to the smell of the dope. The mucous membrane of the buccal cavity and nose has a pale and dull appearance and the saliva and nasal secretion is of a greater consistence than normal.

Since there is no precedent to guide one in the treatment of Dope Poisoning, the following method seems at present to be the most satisfactory. Its object is alkaline saturation of the tissues. Many of the most alarming and troublesome symptoms have a marked resemblance to those met with in cases of acidosis. Whether this similarity is essential or fortuitous I cannot say, but it certainly is quite remarkable in some instances. The patient is put to bed between blankets and, since a feeling of chilliness is usually complained of, hot-water bottles are placed at the extremities. A dose of calomel combined with bicarbonate of soda is given, followed by a saline. An alkaline mixture of the following type is exhibited:—

R. Sod. Bic., oz. i.
Mag. Carb. Poud., dr. ii. gr. 40.
Bismuth Carb., dr. ii. gr. 40.
Tr. Bellad., dr. ss.
Tr. Nuc. Vom., dr. i. ss.
Paraff. liq., q.s.
Aq. chlorof. ad. oz. viii.
Sig. Oz. i. T. W. S.

Unless albuminuria is a marked symptom, a small dose of calomel is given daily for four or five days.

The diet consists of milk, milk and soda water, and any of the well-known malted foods (Benger's,

Allen and Hanbury, Horlick's Malted Milk, etc.), pure flavoured gelatine, but no meat jellies. The patient is encouraged to drink large quantities of water, preferably as hot as can be taken in sips. The water can be made palatable, so that large quantities can be taken, by a pinch of salt or a clove dropped in if hot, or a slice of lemon or orange if cold. Barley water freshly prepared, weak tea, or imperial drink can be added, but no coffee, cocoa or alcoholic beverages are allowed. Free daily evacuation of the bowels must be procured.

The patient is kept in bed until all the symptoms have subsided. Under this *régime* the patient usually recovers rapidly if the case is seen early enough.

The preventive measures that suggest themselves are :—

1. A thorough downward ventilation, especially active immediately below the place where the doping is done.

2. Roomy, but not necessarily lofty workshops.

3. Impermeable gloves to be worn by the workers during the time they are engaged in doping. The hands to be washed with spirituous or etherial soap (special attention to scrubbing the nails) immediately after working with the dope.

4. Daily inspection of the hands of workers, especially before meals.

5. Prophylactic daily dose of some alkaline mixture.

6. Cessation of all dope work upon complaint of any characteristic symptom.

In conclusion, it is interesting to note that women workers appear to suffer more frequently and severely from this affection than men. Whether because there are a greater number of women employed in this manner than men, or because men are more resistant, is difficult to say. There is also a great difference in the susceptibility of individuals.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

SURGEONS AND PETROL.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—"The medical advisers to the War Office have decided that London consultants can do without cars—or drive them themselves."

Such is the edict of the various tribunals before whom these medical men appear who wish to obtain their chauffeurs' release. Let us now consider how this decision is arrived at and analyse its justice.

The medical advisers in this instance appear to be the Central Medical War Committee—or rather that small sub-committee responsible for the arrogance and ill-temper which met representatives of the medical profession some weeks ago. These men, chagrined at the failure of the consultants to accept them with open arms, have wreaked their petty vengeance in the above manner.

Consultants, they say, are not wanted! Now, let us concede that every eligible man should serve; that feeling and no less is representative of the thoughts of all medical men, consultants and general practitioners. But let us also in all fairness consider the question from the point of view of the surgeon. It is he who most needs a competent chauffeur. Some of us there are who can drive even in the present Cimmerian gloom with unshaken nerves. More power to them. Other weaker mortals, like myself, cannot. Years ago, before the war, I learned to drive. Pleasant it was spinning along the clear roads. Soon an urgent case called me to a suburb, and on the way a hair's breadth escape shook my budding confidence. At the operation the knife quivered in an unpleasantly dangerous fashion.

A week later, having operated consecutively for five hours, returning home dead tired, I allowed my attention to wander, with the result that in the same journey I knocked over a cyclist and finished up in the back of a hansom. I then resigned the wheel in favour of my chauffeur.

That represents the surgeon's side of the picture.

Let us suppose that one of the great ones of the Army Council or the self-opinionated members of the British Medical Association are suddenly stricken with severe abdominal pain. A surgical crisis has arisen, and a surgeon is summoned. Perhaps he has no car and cannot get down—or perhaps he starts and gets a puncture on the way—or goes astray from the road to his destination. Hours late, with a shaking hand and disordered mind, he reaches his patient, and may have to perform a critical and urgent operation.

I can wish nothing worse for those unreasonable gentlemen that I have indicated than that such a fate may befall them or their families.

I am, Sir, yours truly,

"S. O. S."

[We know at least two eminent surgeons who have never driven a motor car and who do not intend to learn to do so.—ED., M.P. and C.]

THE STUDY OF THE INTERNAL SECRETIONS

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The increasing appreciation of the importance of the glands of internal secretion and their influence upon the ætiology as well as the treatment of many disorders, has made the subject of unusual interest to many physicians. It has been suggested recently by several American physicians that it might be advantageous to form an "Association for the Study of the Internal Secretions;" and it is desired to know whether there is sufficient interest in this matter to warrant its further consideration.

A few of the prospective advantages of such an association would be: (1) the assembling of those with a mutual fellowship of interest in this subject; (2) facilitating the exchange of ideas, inquiries and reprints on the internal secretions; (3) enabling those who are interested, but do not have the facilities, to be kept in touch with the articles that are appearing on this subject so frequently, but in such scattered and inaccessible periodicals—perhaps a monthly list of these articles with a brief *résumé* of their contents eventually might be prepared; (4) facilitating concerted clinical study of various phases of the subject, and also the measures being brought forward in organotherapy.

No effort has yet been made to form such an association; but any physicians who are interested and would welcome the establishment of a community of interest embracing some or all of the points just mentioned, as well as others which cannot be enumerated for lack of space, are requested to send their names and addresses (on a postal card preferably) to the undersigned, at 715-19, Baker-Detwiler Buildings, Los Angeles, California, U.S.A.

HENRY R. HARROWER, M.D.

PANEL MEDICO-POLITICAL UNION.

To the Editor of The Medical Press and Circular

Sir,—May I be allowed to dispel the belief which you apparently hold as to the constitution of this Union? You conclude the "Peripheral" observations in the current issue by saying:—

"It is a pity that the Panel Medico-Political Union appears so to have restricted its scope as to exclude those who are not panel doctors. There are other members of the profession who might suitably be included within the fold of its activities."

If you will be good enough to refer to the Rules of this Union (a copy of which is enclosed), you will notice that any duly qualified medical practitioner within the meaning of Section 34 of the Medical Act, 1858, is eligible for membership. Every application, however, is considered by the Council, and no name is enrolled until a ballot in favour has been registered. Yet, while our constitution is framed so as to embrace the whole of the medical faculty, we have not, in practice, upheld the candidature of any member of the profession who is not engaged in panel practice. The reason for this attitude is, I believe, manifest to all who have followed the manner in which the Government has of recent years interested itself in medical matters.

I think it may be safely asserted that, with the introduction of the National Insurance Act, the pure individualism of practice, at least among the poorer classes of the community, disappeared. Those doctors who were responsible for the formation of this Union soon realised one important fact—namely, that it depended entirely on the practitioners themselves whether the change that had thus taken place, with so much parade and ostentation, was or was not to be to our advantage. For, in the place of private adjustment as between a doctor and his patients, we have, under the panel system, a contract between the State on the one hand, and a body of some 15,000 medical practitioners on the other. And the only way in which persons bound by contractual relations can adequately safeguard themselves is by availing themselves of the immunities provided by the Trade Union Acts.

The State does not, it is true, differentiate between the profession as a whole and that vast section which has taken service under the National Insurance Act: the Local Medical Committee is appointed by the doctors in a particular area and not exclusively by panel practitioners; and the regulations relating to the constitution of panel committees enjoin that at least three-quarters shall be panel practitioners. We, however, are convinced that panel matters should only be discussed by panel men, and that an independent organisation is an absolute essential.

The work undertaken by the Union, however, is not and cannot be restricted to the panel service alone. The panel doctor is not a panel practitioner only. He is also a general practitioner. Consequently the needs of general practitioners are also the needs of the panel profession; but the converse does not necessarily apply. It is for this reason the Union has advocated, and has so determined its administrative policy, that in panel matters, to achieve the best results for all concerned, the deliberative body, which it is the business of the medical faculty to provide, must be composed entirely of panel practitioners. This does not imply that extraneous advice shall not be obtained. It simply means that the ultimate decision shall rest exclusively with the interested parties. If, therefore, non-panel men are to be admitted into the Union, they must fully understand that they will have no vote in panel matters.

This Union was formed to resist encroachments upon the rights and privileges of the medical faculty, and to promote its interests in every legitimate way. We are not hostile to the British Medical Association. We apply fair criticism to its actions; and when we consider that it has taken a false step or made a colossal blunder we are not slow in passing strictures upon and severely censuring its conduct. We do not think it can be controverted that the Association is—owing, presumably, to conflicting interests and extraneous influences—completely unable to negotiate with the Government from a well-defined standpoint—hence the recent compromises which have proved to be so unfavourable to the bulk of the profession.

In conclusion, I should like to add that I share your views that the scant leisure of the general practitioner has been responsible for his apathy. To spend one's life tending the sick in an overcrowded industrial area should call forth expressions of thanks from a grateful Government; instead, we find no opportunity is lost to hem the profession in with regulations and, by imposing "un-feed" duties, to add to its burdens. This could never happen if the profession were properly organised and could make its voice heard. We owe you, Sir, a debt of gratitude for sounding such an eloquent call to arms.

I am, Sir, yours truly,

A. Welply,
General Secretary.

47, Fleet Street, London, E.C.
May 18th, 1916.

THE CONSCIENTIOUS OBJECTOR.

To the Editor of The Medical Press and Circular.

Sir,—Mr. Tennant, in the House of Commons, has expressed the wish that there was some formula by which these objectors could be brought to book. For those who object to serve on the ground that they are forbidden by the New Testament to shed blood on any grounds whatever there are plenty of formulas to hand, and I would advise all of this class of objectors to read and digest the Rev. Lawrence Green's letter which you published on the 10th inst. In that letter the religious qualms of the C.O. are, as far as I can see, absolutely settled, and the basis of Scriptural objection is completely cut away—an unpleasant fact perhaps for the objector, but one that has to be faced by him! I wonder how it comes about that so many conscientious objectors come from Cambridge, many more than from Oxford! I understand that the chapels at the Cambridge colleges are smaller than those at Oxford, and are not so well attended. Is there then something fundamentally different in the teaching at the two universities? Whatever may be the cause it is an interesting fact, and there must be some way of accounting for it. Dr. Gwillim Davies seems to be impatient with the law. Of course, the law is a changeable guardian—it must be so, because not only new perversions, but the misrepresentations of old obligations have to be dealt with as they arise, and the twists and turns of those who try to wriggle out of conditions which are inconvenient or unpalatable must be met by strong and new measures when, as is the case of the conscientious objectors, they threaten the safety of the realm. I suppose that if the C.O.s are sincere they would wish to see the whole nation made proselytes to their apostasy; where then should we be? The whole brotherhood of the C.O.s would be promptly exterminated by the conscientious Hun who would quickly impose a new "conscience" on any survivors, viz., that of doing what "Kultur" dictates!

Dr. Davies chooses Lavater's dictum from among those tendered by a "Student of Psychology." I thought he would—it seems to suit his purpose—but it is rather unfortunate because Lavater was an ingenious empiric, and not a scientific man. Personally, I prefer Montaigne, who says "the laws of conscience which we say are innate do really arise from custom," *i.e.*, from environment, experience and education. If there is such a thing as a really conscientious objector he is of no use to the country, and in his isolation he is to some extent a menace to the integrity and solidity of the Empire. If he is not honest, but is the mistaken interpreter of true psychological terms, and refuses, in his self-esteem, to be properly instructed, why then he must be treated as any other dishonest person would be. There are, I know, many who try to obtain exemption from service for family reasons, many of which seem valid. These I think ought to be called simply "objectors"—they would fight if they could and they are entitled to consideration. They are of a different class from the objectors whose "conscience" is an artificial compound of self-interest and of special pleading. In conclusion I beg to thank you, Sir, for kindly opening your columns to a discussion on this burning subject.

I am, Sir, yours truly,
T. CLAYE SHAW.

Weymouth Street, London, W.,
May 19th, 1916.

PATENT MEDICINES AND THE BUDGET.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Who is it wants the patent medicine fraud done away with? Is it the health crank, the sanitary reformer, the medical profession, or any other party in the State? The man in the street, the voter whom the politician must conciliate if he would retain his salary, is quite cold about it. He argues that the doctor sells him a bottle worth twopence and charges him from eighteenpence to half-a-crown for it; and he is unable to see why, if it is morally right for the doctor to do so, it should be morally wrong for his rival, the quack, to sell him a penny box of pills for a shilling. I don't expect to see any more come of the Report of the Select Committee on Patent Medicines, nor any reform in the patent medicine system, until medical practitioners either cease to sell medicine, or where that is unavoidable, sell it at cost price. Alas! it is futile to expect a trader to voluntarily abandon 100 to 200 per cent. profit and no questions asked.

I am, Sir, yours truly,
M.D.

THE B.M.A. AND THE L.G.B.

138, Harley Street, W.,
May 15th, 1916.

MY DEAR HARMAN,—At our annual meeting I wish to ask a question: "Is it true that the deputation from the head office of the B.M.A. to the L.G.B. admitted that 1s. would be a sufficient fee for notification of infectious diseases?" If the answer is No, the matter drops; if the answer is Yes, then I move:—

"That the Marylebone Division expresses its indignant surprise that the B.M.A. should have made such a statement, and asks the representative meeting to express its disapproval and also its instruction to try to have the 2s. 6d. fee restored.

Yours sincerely,
(Signed) FRED J. SMITH.

108 Harley Street, W.,
May 16th, 1916.

DEAR DR. SMITH,—Cross-examining counsel loves to put to the witness in the box a question and demand a plain Yes or No. There are not many questions that can be answered thus simply. But happily your question can be truly answered in this curt fashion.

You ask: "Is it true that the deputation from the head office of the B.M.A. to the L.G.B. admitted that 1s. would be a sufficient fee for notification of infectious diseases?" I answer No, and without hesitation.

At our interview with the Government representatives we took up a definite and unassailable stand against the statement of the Retrenchment Committee that the filling of a notification form involved no more than "clerical labour worth one shilling." This statement, we maintained, showed a total lack of appreciation on the part of the Government advisers of what the notification of a disease meant and involved. We pointed out that serious responsibility was involved, and one that laid the doctor open to an action at law in case of a real or alleged error on his part. In rubbing in this statement I confined myself to my own knowledge of the notification of ophthalmia neonatorum, and the case was admitted by Mr. Hayes Fisher, the Government representative, who happened to have more than an ordinary knowledge of this disease. Not only did we repudiate the Government position, but we urged that the present fee was all too small for such work. We admitted that the same heavy responsibility did not hold in the case of the notification of measles, for no parent would be likely to be disturbed at the notification of a fever which was unfortunately held by most to be too trivial for the care of a doctor. And that as the fee for the notification of measles was already on a different basis to that of other notifiable diseases the Government might logically claim to treat it separately. But we made it clear that any exceptional fee for measles was to be considered only "as a reduction on taking a quantity," and a war economy concession, and not the concession of the professional position. I should like your permission to publish this correspondence in the medical journals.

Yours sincerely,
(Signed) N. BISHOP HARMAN.

TRANSACTIONS OF SOCIETIES.

LONDON DERMATOLOGICAL SOCIETY.

MEETING HELD TUESDAY, MAY 16TH, 1916.

The President, DR. J. L. BUNCH, in the Chair.

DR. CHRISTOPHER-KEMPSTER brought forward the following case for consultation. A soldier æt. 36, who first came out in a "flush rash" while in South Africa 16 years ago; this was accompanied with sickness and vomiting which lasted from three to four hours; he then became so bad that he could not stand, he complained of headache and had to lay up because he felt so ill, this went off in three or four days. He then started peeling around the ears and neck and finally peeled all over. The scales came away in large flakes which was not repeated on any particular spot. The second attack came on six years later, and he has repeated attacks every year, generally occurring in the spring or autumn. The present attack started on May 5th, and on admission to the hospital he was peeling, his temperature was 99.6, and has been normal since. He has been treated for many diseases such

as scarlet fever, nettle rash, German measles and quinine rash.

In the discussion which followed, Dr. Morgan Dockrell suggested that the case was one of erythema scarlatiniforme.

The President showed among other cases, a boy with keratosis-pilaris, and in contrast to this a case of parakeratosis variegata of ten months' duration, also a woman æt. 65 with a fungating condition on the leg; a microscopic section was shown which proved to be tubercular.

Dr. Morgan Dockrell showed a case of melanotic sarcoma, which had been cured at the Radium Institute.

Captain W. Griffith showed a very striking case of ichthyosis in a boy æt. 16.

Dr. W. Knowsley Sibley showed a woman, æt. 69, with a rodent ulcer on the cheek and xanthoma on the eyelids, also a case of tertiary syphilis in a woman æt. 51, ulcerated lesions were present on the right cheek, spreading down the neck on to the arm and chest; the condition had been present for ten years, and the most striking feature was that the patient had never had any treatment, only what she had applied herself, which was boiling water fomentations.

Captain C. H. Mills showed a case of syphilis complicating an eruption of lichen planus; the patient first had lichen and then contracted syphilis; the lichenoid papular rash was present all over the trunk, the patient had injections of intramine and ferrivine, and in spite of this the Spirochæta pallida was found to be present in the chancre until the day the sore dried up.

Colonel Harrison, R.A.M.C., made reference to the treatment of syphilis with intramine and ferrivine, and said that in his experience intramine was only a source of torture to the patient, and even if followed by injections of ferrivine the results were absolutely nil: he said that the point which had to be considered was whether they were justified in using intramine or ferrivine in the treatment of syphilis.

The President (Dr. J. L. Bunch) then read his paper entitled "Dermatitis due to Hair Dyes"; an interesting discussion followed.

SPECIAL REPORTS.

THE BOMBAY BACTERIOLOGICAL LABORATORY.

The "Report of the Bombay Bacteriological Laboratory for 1914" (Bombay: Government Central Press. London agent: Constable and Co. 1916. Price 5d.), edited by Major Glen Liston, C.I.E., I.M.S., Director, contains accounts of much useful work. The work of the laboratory is twofold. All the anti-plague vaccine for India and its dependencies is made there, and investigations concerning plague are carried on. It is also the laboratory for preventive medicine and pathological diagnosis for the Bombay Presidency.

The total number of doses of anti-plague vaccine issued in 1914 was 812,942. It is not easy to make a just comparison as regards the incidence of the disease on the inoculated and the uninoculated, but the conclusion is come to that the uninoculated were attacked three times more frequently than the inoculated. It is easier to estimate the case mortality among the two groups, and it appears that whereas 72 per cent. of the uninoculated who were attacked died, only 20 per cent. of the inoculated who were attacked died.

Among the various studies undertaken in the laboratory were some interesting researches bearing on tuberculosis. Having noted that tuberculosis is a rare disease among cattle in Bombay, it was important to investigate whether bacilli of the bovine type were frequently met in the disease in human beings. Fifteen strains of tubercle bacilli were isolated during the year, of which fourteen were from cases of disease of glands. In no case was a strain of bovine type encountered.

Dr. Soparkar made some interesting observations on the vitality of the tubercle bacillus outside the body. He found that when sputum was exposed to the direct action of the sun in Bombay, the bacilli remained alive for six hours, but were dead in eight hours. When tuberculous sputum was exposed in a well-lighted room, but protected from the direct rays of the sun, tubercle baciili could be isolated from it alive six days after exposure, but all the tubercle bacilli were dead in eight days. Tuberculous sputum, when kept in a dark cupboard, although completely desiccated over lime still contained living bacilli six months after it had been deposited. These observations show that sunlight is an important agent in destroying tubercle bacilli, and that dark rooms in which the sputum of tuberculous patients has been deposited may remain infected for months.

MEDICAL WAR HONOURS.

D.S.O.

His Majesty the King has been graciously pleased to approve of the appointment of the undermentioned officer to be Companion of the Distinguished Service Order, in recognition of his gallantry and devotion to duty in the field:—Temp. Captain Robert McCowan Hill, M.B., R.A.M.C. (attd. 2nd Bn., Arg. and Suth'd Highrs.), for conspicuous gallantry and devotion to duty. He went to an area which was under intense bombardment, amputated the leg of a wounded officer, and attended to other wounded under most difficult and dangerous circumstances. Finally, he accompanied two stretcher cases back under shell-fire.

Military Cross.

His Majesty the King has been graciously pleased to confer the Military Cross on the undermentioned officer in recognition of his gallantry and devotion to duty in the field:—Temp. Captain James Lennox Stewart, M.B., R.A.M.C. (attd. 1st Bn. Gord. Highrs.), for conspicuous gallantry and devotion to duty on several occasions when tending the wounded under heavy fire. On one occasion he rallied men and set a splendid example of coolness and bravery.

Foreign Decorations.

His Majesty the King has been graciously pleased to grant unrestricted permission for the wearing of the Decorations specified against the undermentioned officers' names, in recognition of their distinguished services during the campaign. Decorations conferred by his Majesty the King of Serbia on members of the Royal Army Medical Corps Mission to Serbia, March to June, 1915:—

Order of St. Sava.

Capt. Norman Cameron, M.B., 5th Class; Temp. Capt. John Matthewson Clements, M.D., 5th class; Temp. Capt. Bernard Creasy Ewens, 5th class; Temp. Capt. Alexander Keith Forbes, M.B., 5th Class; Temp. Capt. Charles Michael Forster, 5th Class; Temp. Capt. John McAdam Hill, M.B., 5th Class; Temp. Col. William Hunter, C.B., M.D., F.R.C.P., 2nd Class; Capt. Sydney Walker Lund, M.B., 4th Class; Temp. Capt. Samuel Edward McClatchey, M.B., 5th Class; Temp. Capt. Charles Rowley Nicholson, 5th Class; Temp. Capt. Thomas Holmes Ravenhill,

M.B., 5th Class; Temp. Capt. Hugh Young Riddell, M.B., 5th Class; Temp. Capt. John Henry Victor Scott, M.B., 5th Class; Temp. Capt. Philip John Ambrose Seccombe, M.B., 5th Class; Temp. Capt. Bryce McCall Smith, M.B., 5th Class; Temp. Capt. Charles Edgar Holton Smith, 5th Class; Temp. Capt. Robert Haig Spittal, M.B., 5th Class; Lt.-Col. George Elliott Frank Stammers, 3rd Class; Temp. Capt. Lewis Augustus Walker, M.D., 5th Class; Capt. Edward Sancton Walls, 5th Class; Temp Capt. Gerald Whittington, M.B., 5th Class; Temp. Capt. John Samuel Williamson, 5th Class; Temp. Capt. William Miller Will, M.B., 5th Class; Francis Frederick Brown, Esq. (late Lt., R.A.M.C.), 5th Class; William Whiteman Carlton Topley, Esq. (late Capt., R.A.M.C.) 4th Class.

OBITUARY.

DR. JOHN HEPBURN LYELL, M.D., PERTH.

DR. JOHN H. LYELL passed away at his residence in Perth on May 12th. He had been in rather indifferent health during the past winter. Deceased was a native of Newburgh, and received his education at Perth Academy. He studied at St. Andrews and Glasgow, and qualified M.B., C.M. at Glasgow in 1896. He took the M.D. degree in 1901. For a period he acted as House Surgeon at Perth Royal Infirmary, and in 1891 started practice in Perth. Dr. Lyell was held in the highest respect and esteem in the community. In the affairs of the Infirmary he took a keen interest. For long he was the Out-door Patient Physician to the Perth Infirmary, and for the last five years he was radiologist to the institution. For the last two years he had been Visiting Physician to the Infirmary, and was in charge of the X-ray apparatus. He also held the appointment of Assistant Medical Superintendent to Perth prison, and for some time he acted as Secretary to Perth branch of the British Medical Association. He was Joint Secretary of the Local Medical Panel Committees of Perth City and County. A keen lover of science, he was identified with Perthshire Natural Science Society, and from time to time contributed papers which were informative, graphic, and of original merit. He was a member of the Röntgen Society, and an honorary life member of the St. Andrew's Ambulance Association. Dr. Lyell is survived by a widow and three children.

DR. GEO. EDWARD LANYON, M.B., C.M., J.P., FALMOUTH.

DR. GEORGE LANYON, Medical Officer of Health of the Port of Falmouth, died suddenly at his residence in Falmouth on April 17th, at the age of 50. After a medical training at Edinburgh University, he qualified M.B., C.M. in 1889. He settled in Falmouth, and soon acquired a large practice. Besides being Medical Officer of Health for the Port of Falmouth, he had recently been appointed a magistrate for the town, where he was highly respected. He leaves a widow and five young children.

DR. JAMES BRUCE RONALDSON, M.D., F.R.C.S., COLINTON.

THE death took place at Colinton, on May 17th, of Dr. James Bruce Ronaldson, who for a long period of years practised in Haddington. Educated at Belfast, Dublin, and Edinburgh, he qualified L.A.H. Dublin, L.R.C.P. and S. Edin. in 1874. In 1895 he took the M.D. St. Andrews. In addition to a large private practice, Dr. Ronaldson for many years held the appointments of medical superintendent of Haddington District Asylum, and M.O.H. for the burgh of Dunbar. He also took a deep and active interest in local affairs, and for upwards of thirty years was associated with the 8th Battalion the Royal Scots, receiving the Volunteer decoration for long service, and latterly holding the rank of Honorary Surgeon-Colonel. Alike in private and professional circles Dr. Ronaldson was held in high esteem. He was 65 years of age, and is survived by a widow and son, who is in the medical profession, and is at present on war service.

DR. TOM ROBINSON, M.D., SPILSBY.

WE regret to announce the death of Dr. Tom Robinson, which occurred at his residence, East Kirkby Manor, Lincolnshire, a few days ago. Deceased was for many years in practice in London, and specialised in diseases of the skin and allied departments. He occupied the posts of physician to the Western Skin Hospital and other hospital appointments. He wrote some years ago a series of papers for this journal, and contributed several useful and suggestive articles to the literature of his subject in other directions. He took a great interest in the founding and the carrying on of the New London Dermatological Society, the members of which at their last meeting proposed and carried *nem. con.* a vote of condolence and sympathy with the relatives of deceased, and expressed their regret at the loss of so valued a colleague. Dr. Robinson retired into private life about three years ago, and resided at Spilsby until his death.

REVIEWS OF BOOKS.

TWO USEFUL BOOKS FOR NURSES. (*a*, *b*)

THE nursing profession is well supplied with books, and we have pleasure in welcoming new editions of two such volumes which have recently come to hand. Mr. Childe deals with a particular branch of a nurse's work—namely, surgical nursing, and he has written a book which should appeal to all nurses who take an intelligent interest in surgical work. After explaining the significance of antisepsis and asepsis in operative surgery, the author describes the preparation of patients for operations, and the after-treatment of such cases, and he discusses in detail the various duties of ward sisters, nurses, and others who may be associated in the treatment of surgical patients. The subject is very fully reviewed and all directions are clearly given. The iodine method of preparing the patient's skin for operation is enthusiastically endorsed, and we note with pleasure the author's brief explanation of Crile's theory of "surgical shock," and the measures which it entails in the preparation for operation and in the conduct thereof. The actual prescribing of drugs is no part of a nurse's duty, but she ought to know that certain drugs may be given in certain conditions and the reasons for their administration. Both these points within the limits indicated receive consideration in this volume, but we were rather surprised to find no mention of the value of pituitary extract in surgical cases. A section is devoted to operations in surgical homes and private houses, and in a short concluding chapter there are some very terse remarks regarding nursing in military hospitals. The book is thoroughly practical, and can be recommended not only to nurses but also to dressers and junior medical practitioners.

Mr. Sydney Welham's little work is an unpretentious and yet ambitious production, for an attempt has been made to cover the whole field of nursing, with the result that in parts the matter is far too condensed to be satisfactory. There are five sections—namely, Anatomy, Physiology, Medicine, Surgery, and Nursing, while in an appendix will be found some useful remarks on infant feeding, tables of weights and measures, a hospital diet scale, etc. A

(*a*) "Surgical Nursing and Technique." By Charles P. Childe, B.A., F.R.C.S.Eng., Lieut.-Colonel, Royal Army Medical Corps (Territorial); Senior Surgeon, Royal Portsmouth Hospital, etc. Second edition. 1916. London: Bailliere, Tindall and Cox, 8 Henrietta Street, Covent Garden. Price 3s. 6d. net.

(*b*) "A Manual for Nurses." By Sydney Welham, M.R.C.S., late Resident Medical Officer, Charing Cross Hospital. Second edition. London: Mills and Boon, Ltd., 49 Rupert Street, W. Price 1s. 6d. net.

glossary has been given at the end to explain terms in the text which may not have been adequately described. With the exception of a few diagrammatic temperature charts, there are no illustrations. The book is pleasantly written, and all points are clearly and succinctly stated within certain limitations.

A POCKET MEDICAL DICTIONARY. (*a*)

The issue of a 7th edition of this small work testifies to its popularity. It has certainly proved its usefulness as a handy and reliable pocket reference book. It is comprehensive. We read through the "table of bacteria" it contains, and felt humbled thereafter by the extent of our ignorance. Clearly printed on good paper, the new edition should increase considerably the already large number of medical men who have found this dictionary of value.

AN IRISHWOMAN IN CHINA. (*b*)

Miss French went to Ningpo in 1888 to take charge of a small hospital for Chinese women. She subsequently married Dr. C. C. de Burgh Daly, and spent in all some twenty years in China, first at Ningpo and afterwards in Newchwang, where Dr. Daly held the position of Port Medical Officer. Since their return home a few years ago, she has occupied some of her leisure time in writing a singularly charming volume of reminiscences of her life in the Far East. She and her husband passed through many stirring experiences—the Chino-Japanese War, the Boxer rising, the Russo-Japanese War, and two epidemics of plague. When the great Manchurian epidemic broke out, Dr. and Mrs. Daly were home on leave, but a cablegram brought them back as fast as the Trans-Siberian Railway could carry them. Mrs. Daly describes the episodes of these adventurous times with much spirit, and we gain a deep respect for the courage and light-heartedness with which she faced dangers and difficulties. Notwithstanding the interest of her account of these stirring times, we have found Mrs. Daly's chapters dealing with Chinese life in times of peace of even greater interest. She has a great affection for the Chinese and a deep appreciation of their good qualities. It is, perhaps, her Irish blood which leaves her free of the patronising attitude of which so few Europeans can divest themselves in dealing with alien races. She appears to have been on terms of intimate friendship with many Chinese ladies, whom she found intelligent and keenly interested in European modes of life. Mrs. Daly, also, while in Manchuria, made friends of many Russian officers, military and naval, and her remarks on the complexity of the Russian character are shrewd. The same general who was with difficulty dissuaded from delivering over a whole city to loot and rapine was capable of showing the most humane consideration for an injured Chinese child. We could have wished for some more detail as to Dr. Daly's medical work, but it is only incidentally that we learn how highly it was valued both by the European community and by the Chinese.

The charm of the book is greatly enhanced by the delightful illustrations of Chinese life, most of which are reproductions of Chinese paintings. We cannot do better than recommend the book to the perusal of our readers who like a change from strictly professional reading.

The death of Dr. John Service, a well-known medical man and an authority on colloquial Scots, is announced from Sydney, New South Wales. Dr. Service was born at Kilwinning, and was educated at Irvine Academy and Glasgow University. His best-known books are "Dr. Duguid" and "Robin Cummell," and he was the author of many sketches of social life in Scotland 150 years ago.

(*a*) "A Pocket Medical Dictionary: 35,000 Words." By G. M. Gould, A.M., M.D. Seventh edition, revised. Pp. 1003. 32mo. London: H. K. Lewis and Co., Ltd. Price 5s. net.

(*b*) "An Irishwoman in China." By Mrs. De Burgh Daly. Illustrated. London: Werner Laurie. 1916. Pp. xi. and 295. Price 18s. 6d. net.

Medical News in Brief.

Not a Duly Qualified Doctor.

At Linlithgow Sheriff Court on May 16th, a studious-looking man, named George Bowie Farquhar, was charged with having at Blackridge in February last pretended to Dr. William Thomas Lindsay that he was a duly qualified medical practitioner, and obtained employment as his *locum tenens* at a salary of £6 5s. a week. A previous conviction at Manchester was recorded against him. A plea of guilty was tendered, and an agent stated that accused had a knowledge of chemistry, and had taken some of the preliminary examinations in medicine. Sheriff MacLeod said he would not be doing his duty for the protection of the public unless he imposed the highest sentence of that Court, three months' imprisonment.

Russo-German Red Cross Co-operation ended.

According to *Dagens Nyheter*, the closing of the Red Cross conference means the end of all co-operation between the Russian and German Red Cross Societies, because the German Red Cross authorities refuse to express regret for the sinking of the Russian hospital ship *Portugal*. The journal adds that the projected joint visits to prisoners' camps have fallen through.

Hampstead General Hospital.

The Grand Duke Michael of Russia was re-elected President of the Hampstead General Hospital at the annual meeting on May 16th. In returning thanks, he paid a warm tribute to the work of the members of the medical, nursing, and official staff, and expressed his admiration of the quiet and efficient way in which they had worked, especially during the trying time of this terrible war. The institution had grown from a very small hospital into one of over a hundred beds, and of these sixty-four had been placed at the disposal of the authorities for the reception of wounded soldiers.

Administration of Tuberculosis Grant.

The Local Government Board have expressed the view that where the primary object of an institution provided by a local authority is to deal with tuberculosis, the control of the institution does not fall within the province of the Education Committee of the authority, but comes under the control of the health department of the authority, which is charged with the treatment of tuberculosis, and that, as the administration of the tuberculosis grant is now in the hands of the Local Government Board and not of the Board of Education, they were only prepared to afford assistance in the provision of buildings to be under the control of the local authority as a health authority.

Victoria Hospital for Children.

The annual meeting of the Council of the Victoria Hospital for Children was held on May 17th, Princess Louise, Duchess of Argyle, presiding. Mr. F. W. Hunt, Chairman of the Committee, in moving the adoption of the report, pointed out that two wards had been entirely given up to wounded soldiers during the year, and said the number of children treated had been reduced to 919. The abnormal conditions prevailing last year were reflected in the expenditure, the cost of maintenance being £1,264 more than in the preceding year. There had been a serious decrease in annual subscriptions. Her Royal Highness said she wished particularly to thank the members of the Ladies' Association for the great assistance they had rendered the hospital.

Children's Health and Food.

Sir Thomas Barlow, speaking at a meeting at the Mansion House, on April 25th, on behalf of the National Children's Home and Orphanage, 1,000 of whose boys have joined the colours, remarked that in these momentous days we must not only save infant

life, but have healthy children to grow into robust men and women, in order that they might fight the battle of life in conditions which they could not foresee, but which might be more strenuous than now. The open-air system had proved the value of sunshine and fresh air, but it must be supported by good food and warm loose clothing.

We were not sufficiently alive to the need for making food attractive and palatable for growing children. They did not want a lot of red meat, but what they did have should be well cooked, and accompanied by plenty of vegetables and fresh fruit. Bananas and oranges had a very far-reaching effect on the digestion. Jam, valuable as it was, was not so good as fresh fruit for children of the humbler classes, who were absolutely certain to suffer if its importation was interfered with.

Wittenberg Doctors.

In the House of Commons on May 17th, Mr. Malcolm asked the Under-Secretary for War whether the Royal Army Medical Corps doctors, whose gallant behaviour at Wittenberg had been rewarded by His Majesty, were volunteers for that particular work or were detailed by the Germans to do it; and whether other British doctors in other typhus camps in Germany would be recommended for similar recognition.

Mr. Tennant replied: The three officers mentioned were detailed by the Germans for duty in the typhus camp at Wittenberg. My hon. friend may take it that if other officers have done equally good work they will receive equal recognition.

Tuberculous Men and the Army.

The Local Government Board has issued a circular to town, borough, and district councils enclosing copies of an order made by the Board, whereby medical officers of health are required to furnish to the Army Council particulars of all male persons who on January 1st, 1916, were between the ages of 18 and 45, and who have been notified since February 1st, 1913, as suffering from tuberculosis.

The operation of the order is limited to the duration of the present war, and its object is to assist the Army Council in securing that men suffering from tuberculosis are not enlisted.

Swiss Hospitality for Red Cross Nurses.

The Association of Swiss Hotelkeepers has addressed a circular to proprietors of hotels asking them to give gratuitous accommodation for a period of three weeks during June, July, August, and September to Red Cross nurses on leave of all countries. It is expected that hospitality will be provided for some hundreds.

New R.A.M.C. Magazine.

The first number of the *R.A.M.C. Depôt Magazine* has just been issued at the price of 1d. The magazine is attractively got up and illustrated, and contains a number of features, including a "serial," "barrack-room yarns," an "imaginary interview," notes on sports, and general news about the corps. Members of the R.A.M.C. at home and abroad can obtain copies by applying to the office of the magazine, R.A.M.C. Depôt, Aldershot.

War Medical and First-Aid Exhibition.

The War Medical and First-Aid Exhibition, which was to have been held at the Royal Horticultural Hall, Vincent Square, Westminster, from Monday, May 22nd, to Friday, May 26th, has, with the consent of the Minister of Munitions, been postponed to July 25th to 28th inclusive.

Needy Medical Students.

At a meeting of Manchester University Court on May 17th, the Vice-Chancellor, Sir Henry Miers, announced that Mr. Sam Gamble, well known in Manchester, has set aside the sum of £5,000 to be devoted to the purpose of assisting needy medical students. It would be available for women who had passed their first medical examination, and the only condition was that they should be Christians and total abstainers. The endowment would not be administered by the University, but by a small board of trustees. It might, added the Vice-Chancellor, be possible to elect a student under the scheme for the ensuing session.

Accident Reports.

The Home Secretary has informed a deputation from the National Transport Workers' Federation that the proposed abolition of certifying surgeons' reports of accidents will not prejudice the general position of the workers in regard to the medical supervision exercised by the Home Office. The duties of the certifying surgeons in regard to industrial diseases will not be interfered with.

Health of Bath Rural District.

The annual report of the Medical Officer of Health for the Bath Rural District states that the death-rate of 12.7 compares with a death-rate in England and Wales of 14.8, an average death-rate for the previous five years in Bath rural district of 11.44, and a death-rate for England and Wales, less the great and smaller towns, of 13.6. The birth-rate of England and Wales was 21.8, and the Bath rural district 24.2, the figure for England and Wales, less the great and smaller towns, being 20.7. The average for the previous five years in the Bath rural district was 20.82.

Women and War Work.

Bishop Frodsham, speaking at Cheltenham on May 17th, criticised the employment of women in doing men's work in the war. He urged the necessity of safeguarding the mothers and infants in the interests of the nation. Five babies died every half-hour of each day, and this fact had a direct bearing upon the employment of women in men's work. If women's industrial work decreased the birth-rate, or if it brought about the loss of child life through neglect or any other cause, then it could not be justified in the interests of the nation. To sacrifice the capacity for bearing healthy children was an outrageous injury to the individual and to the nation.

The Cost of Notifying Measles.

At a meeting of the Hartismere Rural District Council on May 15th, the Chairman called attention to the large expense incurred in the notification of minor diseases, such as measles. He noticed that one doctor had been paid £8. He thought that this should not be so heavy.

The Clerk said that the amount of the fee was fixed by the order of notification. Whether measles was expected or not, directly the order was issued they had about 100 cases. The doctor was paid 2s. 6d. for the notification of private patients and 1s. for other patients.

New Principal of Edinburgh University.

At a meeting of curators of the Edinburgh University on May 22nd, it was resolved to appoint Sir Jas. Alfred Ewing, Director of Naval Education, Principal in the room of the late Sir William Turner. The new Principal is a native of Dundee and an honours graduate of Edinburgh University. He held the professorship of Mechanical Engineering in Tokio University, Japan, before he was appointed Professor of Engineering in Dundee University College. From Dundee he went to Cambridge, where he left in 1903 to fill his present post. Principal Ewing has been a member of several important committees, and has written widely on scientific subjects. He enters on his new duties in October.

Dundee and Infantile Mortality.

At a meeting of the Public Health Committee of Dundee Town Council on May 18th, Mr. Paton moved that there be appointed a specialist lady doctor at a salary not exceeding £300 to supervise and control the proposed new department. They would thus secure continuity and equality of treatment, which

would at least yield them data that they could absolutely rely on in arriving at a conclusion as to whether they were getting the results they might expect. The cost of the new department would be about £1,100, and of that sum the Public Health Department would have to provide only £500 or £600.

Bailie Anderson, who seconded, said that of all the expenditure that might be admissible at such a time as this, this was an expenditure that no one who had the interest of Dundee at heart would cavil at.

The motion was unanimously agreed to.

Doctors and Panel Certificates.

THE following appears in the *Liverpool Echo* of May 18th:—

"A remarkable allegation—which will doubtless bring strong denials—is contained in the following letter:—

"The stipendiary magistrate is to be congratulated on his outspoken remarks *re* doctors' certificates of incapability. For some considerable time now doctors have, in order to please their patients, issued certificates to men and women on the slightest pretence. In fact, under the National Health Insurance certificates are issued certifying that they have to-day examined So-and-so, when they have not done so; and, further, in numerous cases these certificates are issued to messengers who call on the doctors on behalf of the patients. The attention of the local Insurance Committee is wanted in this direction.—One with Proof."

Medical Men and Compulsion.

IN the House of Lords, on May 22nd, on the consideration of the Military Service Bill, on the motion of Lord Sandhurst, a new clause was agreed to, providing that regulations made under the principal Act should provide for the establishment of professional committees to deal with claims for exemption made by duly qualified practitioners, and the recommendation of such committee should be binding on any tribunal constituted under the principal Act.

New South Shields Hospital.

WITH the object of providing increased facilities for dealing with infectious diseases, and waging a more effectual war upon tuberculosis, the South Shields Corporation have decided, when the times are more propitious, to erect a new hospital. The plans have been prepared by the borough engineer, in the light of knowledge gained through visiting some of the best hospitals in the country, and the institution will therefore be thoroughly up to date and provided with the most modern equipments.

Generally the accommodation for infectious diseases will consist of 124 beds, and for tuberculosis 66 beds. The fever patients will be treated in five pavilions, the dimensions of which will be 195 feet by 38 feet over all, and each pavilion will be provided with sun rooms and verandahs with glass roofs.

In the tuberculosis section of the institution there will be a nursing pavilion 338 feet long, and three separate pavilions for men, women and children. A sheltered playground has been set apart for children, and a large plot has also been reserved for the male patients to cultivate.

Royal College of Surgeons of England.

AT the last meeting of the Council of the College held on the 11th inst., ninety-nine candidates, having passed the required examinations, were admitted members of the College as follows:—

K. D. Atteridge, John Aydon, Hannah K. Alton, A. J. Bado, H. J. Bensted, D. S. Brachman, J. P. Bracken, I. R. R. Brogden, A. S. Carter, L.D.S.Eng., H. H. Castle, L. A. Celestin, G. E. Chissell, Hester M. Church, Mabel C. Clark, A. H. Clarke, P. S. Clarke, H. M. Cohen, W. H. Coldwell, W. M. Crombie, R. C. Davenport, S. G. Dunn, F. Dunphy, M. Dwyer, W. F. Eberli, A. W. F. Edmonds, P. O. Ellison, G. I. Evans, H. S. Evans, L. W. Evans, W. Farquharson, Guy Fehrsen, E. A. Fiddian, S. W. Fisk, M. R. V. Ford, A. R. Fuller, D. H. A. Galbraith, G. T. Garraway, S. C. Ghose, C. C. Goodall, F. H. S. Greenish, Ethne Haigh, Edith C. Hudgell, J. C. N. Harris, S. F. Harris, A. N. Haworth, H. N. Haysom, W. A. Hotson, E. G. Howell, G. P. B. Huddy, S. Hutchinson, T. H. Jackson, B. B. Jareja, W. G. Johnston, A. M. Jones, T. Jones, V. Kameneff, T. L. Kan, R. P. Langford-Jones, E. E. Lightwood, H. B. Logan, P. G. McEvedy, S. S. Malkani, P. S. Marshall, Adeline M. Maitland, F. C. Mason, B. H. Mellon, H. W. L. Molesworth, T. D. Morgan, A. G. Morris, G. Moulson, S. Muttiah, K. V. Muttukumaru, F. Newey, D. C. Norris, A. J. Orenstein, F. C. Ormerod, P. E. Pank, G. E. Paul, R. R. Powell, J. N. Puri, H. M. Quackenbos, R. Rau Damodar, C. R. Reckitt, B. T. Rose, P. G. Russell, Violet I. Russell, M. Schwartz, D. M. Smith, W. Steadman, H. G. Stormer, G. C. Swanson, D. G. C. Tasker, H. W. Taylor, G. B. Wild, R. W. Willenberg, G. C. Williams, A. Williams-Walker, C. E. Wise, R. S. Woods.

C. H. Pywell, having fulfilled the requirements of the Dental Board of Examiners, was admitted a Licentiate.

Society of Apothecaries of London.

THE following candidates, having passed the necessary examination, have been granted the L.S.A. diploma of the Society, entitling them to practise medicine, surgery and midwifery:—M. Dwyer, A. Glen, A. W. North, and L. F. Pain.

Royal College of Surgeons of Edinburgh.

AT a meeting of the College held on May 18th the following gentlemen, having passed the requisite examinations, were admitted fellows:—Dines C. Chakravati, L.M.S.Calcutta, L.R.C.S.Edin., William W. Hoare, M.R.C.S.Eng., L.R.C.P.Lond., M.D.Brux., George R. Livingstone, M.B., Mast. Surg., M.D.Edin., Alfred C. Sandston, M.B., Bac. Surg., M.D.Edin., Neil F. Sinclair, M.R.C.S.Eng., L.R.C.P.Lond., Herbert M'L. Staley, M.R.C.S.Eng., L.R.C.P.Lond., Muhammed A. Wajid, M.B., Ch.B., M.D.Edin.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

LETTERS TO THE EDITOR and Original Papers intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of *bona fides*. These should be addressed to the Editor at the Offices of this Journal; if in Ireland, to the Dublin Office, 29 Nassau Street; from all other parts of the United Kingdom these should be addressed to the London Office, 8 Henrietta Street, Strand.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s., post free at home or abroad.

Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada. For South Africa, The Record Publishing Co., Cape Town. Messrs. Geo. Robertson and Co., of Sydney and Melbourne, are our special agents for Australia.

ADVERTISEMENTS.

FOR ONE INSERTION:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole page, 13 insertions at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistances, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

SANATOGEN.

AN Order has been made by the Board of Trade requiring the following business to be wound up:—

A. Wulfing and Co., 12, Chenies Street, W.C., manufacturers of Sanatogen, Formamint, etc.

DR. T. H. M.—The London and Dublin office addresses of this journal will always be found at the foot of the last page of each issue, according to postal regulations. Letters to the Editor should be addressed as referred to at head of "Notices to Correspondents."

ANÆSTHESIA AND TRUTH-TELLING.

THE Court of Criminal Appeal dismissed the appeal of Henry James Tishaw, who appealed against a sentence of five years' penal servitude and seven years' preventive detention. The Lord Chief Justice said that the appellant in his grounds of appeal asked to be subjected to a test by chloroform, and he apparently had the impression that when he was under its influence he would be bound to tell the truth. The appellant was 46 years of age and had spent 24 years in prison.

DR. BRUCE is thanked for his communication and enclosure. The journal will continue to be addressed to the Mediterranean Expeditionary Force until contrary instructions are received.

A GERMAN MUSICIAN.

THE late Max Reger received the degree of Doctor of Medicine from the University of Berlin on the ground that his music "exercised a soothing influence on the sick." To judge from the specimens we have heard in London it might have sent even a strong man to sleep.—*The Observer.*

TUBERCULOSIS AND RECRUITING.

To prevent consumptives getting into the Army the Local Government Board are asking tuberculosis dispensary officers to assist Army Doctors in examining recruits.

BERLIN'S MOVING KITCHENS.

ACCORDING to a message from Berne, travelling kitchens have made their appearance in the suburbs of Berlin to supply the poor.

M.R.C.P. (Leeds).—The Dr. Jung referred to last week in the communication by Dr. Savill in our columns to which you refer, is a member of the Swiss Medical Faculty, a Professor of the University of Zurich, not an Austrian, as you suppose. His work on "Analytical Psychology," now translated into the English language, is most illuminating, and clearly sets forth the chief differences between the teaching of the rival schools of Zurich and Vienna.

AUSTRALIA AND PATENT MEDICINES.

THE Australian Senate has passed a Bill providing that all patent medicines imported into Australia shall bear a label showing the constituents of the medicine in general terms.

DR. JOHN BROWN.—Your communication reached us too late for our present issue; it will appear in our next.

THE LAST STAGE!

A certain young man of great gumption
'Mongst cannibals had the presumption
To go—but, alack,
He never came back:
They say 'twas a case of consumption.—*Pall Mall.*

FLIES AND DISEASE.

WARNINGS about the danger of flies as carriers of disease germs are being issued by the Lambeth Borough Council.

DOCTORS' MOTOR CARS.

THE National Medical Union hope that the Government will take steps to reduce the duty on motor-car licences payable by the medical profession to that of 1915, and also supply the medical profession with petrol at as low a cost as possible.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, MAY 24TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF THE HISTORY OF MEDICINE (1 Wimpole Street, W.).—4.30 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917. Dr. Michael Foster: Stick Pomanders. And other Exhibits. Papers (at 5 p.m.): Dr. J. A. Nixon and Dr. Charles Singer: Miniatures of the Bristol Guy de Chauliac MS. Dr. Charles Singer: Some Figures bearing on the Practice of Bloodletting in the Fourteenth, Fifteenth, and Sixteenth Centuries. Mr. R. R. Steele: A Note on the Scientific Work of Roger Bacon.

THURSDAY MAY 25TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF NEUROLOGY (1 Wimpole Street, W.).—8 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917. Clinical Cases will be shown, and anyone desiring to show cases is requested to communicate immediately with the Hon. Secretary, Dr. Hinds Howell, 145 Harley Street, W.

ROYAL SOCIETY (Burlington House, London, W.).—4.30 p.m.: Bakerian Lecture—Prof. C. G. Barkla: X-Rays and the Theory of Radiation.

FRIDAY, MAY 26TH.

ROYAL SOCIETY OF MEDICINE (SECTION FOR THE STUDY OF DISEASE IN CHILDREN (1 Wimpole Street, W.).—4.30 p.m.: Annual General Meeting—Election of Officers and Council for Session 1916-1917. Cases: Dr. Eric Pritchard: Severe Rickets, Dr. W. Mitchell Smith: (1) Pigmented and Hairy Nævus with Molluscous Tumours; (2) Giantism. Dr. E. Cautley: (1) Infantilism; (2) Optic Neuritis (two cases). Mr. A. S. Blundell Bankart: Hemihypertrophy. Dr. J. Walter Carr: Juvenile General Paralysis. Short Paper: Dr. J. Lawson Dick: The Teeth in Rickets.

Vacancies.

Royal Victoria Hospital, Folkestone.—Resident Medical Officer. Salary £200 per annum, with board and laundry. Applications to Secretary.

London Temperance Hospital, Hampstead Road, N.W.—Assistant Resident Medical Officer. Salary £120 a year, with residence, board, and laundry. Applications to the Secretary.

The Royal Infirmary, Sheffield.—House Physician. Salary £120 per annum, with board and residence. Applications to Jno. W. Barnes, Secretary.

Bolton Union.—Resident Assistant Medical Officer. Salary £250 per annum, with furnished apartments, washing, and attendance. Applications to H. I. Cooper, Clerk to the Guardians, 28 Mawdsley Street, Bolton.

Bury Infirmary.—Lady Junior House Surgeon. Salary £150 per annum, with board, residence and washing. Applications to the Honorary Secretary, Infirmary, Bury, Lancs.

Manchester Northern Hospital for Women and Children, Park Place, Cheetham Hill Road, Manchester.—Lady House Surgeon. Salary £120 per annum, with apartments and board. Applications to Mr. Hubert Teague, Secretary, 38, Barton Arcade, Manchester.

Hulme Dispensary, Dale Street, Stretford Road, Manchester. House Surgeon. Salary £250 per annum, with apartments, attendance, coal, and gas. Applications to Honorary Medical Secretary.

The Guest Hospital, Dudley.—Assistant House Surgeon. Salary £120 per annum, with board, rooms, attendance, and washing. Applications to the Secretary.

Royal Albert Edward Infirmary and Dispensary, Wigan.—Senior House Surgeon. Salary £250 per annum, with board, apartments, and washing. Applications to L. E. Mapei, Acting Secretary.

Gorey.—Temporary Medical Officer. Salary £146 per annum and £15 as Medical Officer of Health. Applications to R. Creighton, Clerk of the Union. (See advt.)

Appointments.

ECCLES, R. BURTON, M.R.C.S., L.R.C.P.Lond., Medical Officer for the East Riding County Isolation Hospital, Great Driffield.

HALL, O., L.R.C.P. & S.Edin., D.P.H., Medical Officer of Health for Plymouth.

MACKENZIE, FEDE M., M.B., B.S.Lond., Assistant Surgeon to the South London Hospital for Women.

Births.

COOKE.—On May 10th, at Clodiagh, Stanmore, the wife of J. Douglas Cooke, F.R.C.S., R.A.M.C.—a daughter.

FARR.—On May 21st, at Watlington, Norfolk, the wife of C. C. J. Farr, M.R.C.S., L.R.C.P.Lond., of a son.

HARKER.—On May 12th, at Chicago, U.S.A., to Dr. and Mrs. Wade C. Harker (*née* Lyla Macdonald), a daughter.

HUNNARD.—On May 15th, the wife of Arthur Hunnard, M.B., B.S., The Elms, Mansfield, of a daughter.

MALCOLM.—On May 12th, at 10 Rosslyn Hill, Hampstead, the wife (*née* Molly Scott) of Lieut. Alan Malcolm, R.A.M.C., of a son.

MILLS.—On May 16th, at 30 Heath Street, Hampstead, N.W., the wife of Lieut. E. Halford Mills, R.A.M.C., of a son.

WEIR.—On May 18th, at South Lodge, Merstham, Surrey, the wife of Walter Weir, M.B., M.R.C.S., L.R.C.P., of a son.

Marriages.

RICE-OXLEY—MILLER.—On May 16th, at St. Mary Abbot's, Kensington, Douglas George Rice-Oxley, M.B., Captain, R.A.M.C. (T.), second son of Dr. and Mrs. Rice-Oxley, 5 Prince of Wales Terrace, to Estelle Mortimer, only daughter of the late Robert Mortimer Miller and Mrs. Sidgwick, "Branksome," Ipswich.

RYLAND—MOORE.—On May 17th, at The Hirsel Private Chapel, Coldstream, N.B., Capt. Archer Ryland, F.R.C.S.Ed. and R.A.M.C., son of Mr. and Mrs. Woodcoat Ryland, of 43 Holland Park, London, W., to Gladys Mary, daughter of the Rev. C. A. Moore, Domestic Chaplain to the Rt. Hon. the Earl of Home, KT., and Mrs. C. A. Moore, of The Hirsel, Coldstream, N.B.

Deaths.

CATHCART.—On May 14th, at Greenfield, Highgate, Dr. Samuel Catheart, aged 64 years.

GIBB.—On May 13th, at his residence, Sandyford Park, Newcastle-on-Tyne, Charles John Gibb, Esq., M.D., in his 93rd year.

RIVERS-WILLSON.—On May 19th, at Oxford, Alfred Rivers-Willson, Ph.D., L.S.A., L.M.S.S.A.

SHUTER-HILL.—On May 16th, at 27 Warrington-crescent, Maida Vale, Dr. J. Shuter-Hill, eldest son of the late Samuel Hill, Esq., M.D., of 22 Mecklenburgh-square, aged 60 years.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, MAY 31, 1916. No. 22.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

Whistling for Taxis.

ON the question of whistling for taxicabs, a correspondent sends me the following cutting from the Parliamentary Report in a daily:—

"Mr. Herbert Samuel (Yorks, Cleveland), asked by Mr. Cecil Harmsworth (Luton, L.) whether the Home Secretary had powers to prohibit the use of cab whistles in the neighbourhood of hospitals and nursing homes, said: No such power is vested in me, but a by-law made by various borough councils makes it an offence to sound a noisy instrument within a certain distance of a hospital after being requested to desist by a constable, and where this by-law is in force the police take action." My correspondent asks: "Why do not all the London boroughs revise their by-laws so as to enable the police to take action everywhere?" Why, indeed. There is scarcely a district in which this nuisance occurs which does not contain a hospital, a nursing home or a private house in which the sick and weary are tossing for sleep, and these unfortunates are permitted to be disturbed by those fortunates who have just been tossing for deal.

The Leprosy Case.

MR. JUSTICE DARLING set aside the findings of the jury in the leprosy case, saying that "he could see no legal obligation on the defendants, nor could he see any evidence to support the findings of fraud, conspiracy or misrepresentation." His lordship had left the following questions to the jury, the answers to which are appended:—

"(1) Was Mr. Miller when he took the rooms liable to infect persons or the furniture with leprosy, and did Mr. Miller or Miss Miller know this?—Yes.

"(2) Is leprosy infectious or contagious so as to be, in England, communicable from the leper to another?—Yes.

"(3) Did Miss Miller and Dr. Harbord fraudulently misrepresent that Mr. Miller was a fit and proper person to occupy the plaintiff's rooms?—Yes.

"(4) Did Miss Miller and Dr. Harbord conceal from the plaintiff that Mr. Miller was a leper, which made him unfit to occupy the lodgings?—Yes.

"(5) Did Dr. Harbord, acting as agent for Miss Miller and Mr. Miller, state to Mrs. Humphreys that Mr. Miller was not suffering from any infectious or contagious disease?—Yes.

"(6) Were these statements untrue to the knowledge of Mr. Miller, Miss Miller, and Dr. Harbord?—Yes.

"(7) Did Mr. Miller, Miss Miller, and Dr. Harbord conspire to conceal the state of Mr. Miller from the plaintiff, and make false statements to him for that purpose?—Yes.

"(8) Damages?—£250."

The facts.

THE case, it will be remembered, was an action brought against Miss Miller, Mr. Bendell (as executor of the deceased Mr. Miller, who died of leprosy), and Dr. E. A. Harbord, for breach of warranty, fraudulent misrepresentations, and conspiracy. It was alleged that the plaintiffs had suffered damage through the bringing of the deceased Mr. Miller, a leper, into the plaintiff's lodging-house. It was, of course, perfectly obvious to any medical man acquainted with the law that even if it were wrong to take a leper into a lodging-house, on whomsoever the responsibility might rest, it could not be made to rest on Dr. Harbord. Leprosy is not a notifiable disease, and in the case of a non-notifiable disease, not only is a medical man not bound to speak of it, but he is, as Sir Malcolm Morris properly pointed out, precluded by the unwritten laws of the profession from telling it in Gath. If Dr. Harbord had acted otherwise than he did, it is quite certain that the unfortunate patient, to whom alone he owed a duty (the public health was not in question), would have been harried and jockeyed from pillar to post, with the result that his sufferings would have been enormously increased. Dr. Harbord is much to be congratulated on the issue of the case; but he was fortunate in having a judge with the courage and good sense to over-rule the findings of the jury.

Trial by Jury.

IF trial by jury is to survive, the composition of juries must become more discriminate. The original idea seems to have been that a man was entitled to be tried by a jury of his "peers"—this is, his equals. The older term is now employed almost exclusively in a social sense. A

peer now means a nobleman, and it is not so very long ago since a member of the House of Lords, who was indicted for a felony, claimed the right of being tried by his "peers." Nowadays, however, intellect and education cannot be said to be the monopoly of the members of the Gilded Chamber, and anyone who is being tried on a question which involves a due appreciation of abstruse technical facts ought to have a right to a jury of his intellectual equals—men, that is, who may be presumed to have sufficient capacity to comprehend the real points at issue. In the above-mentioned case four of the jury, who, according to counsel, "have been sworn with their hats on," had been bandying about an Old Testament, calling each other's attention to the 13th chapter of Leviticus, which deals with the diagnosis and treatment of leprosy as it was known in the time of Aaron. It is a preposterous thing that medical questions in our Courts of Justice should be decided by the scientific views of Moses as interpreted in the Ghetto. You might as well summon a jury of horse-copers to decide about a submarine.

Dr. Ross and "Sinapis."

The amusing letter of Dr. Ross, of Bedford, which appears in another column, is so personal to myself that I can scarcely avoid a reference to it. I am naturally much flattered by the suggestion that "'Sinapis' is a kind god," but while blushingly admitting the adjective, I must disavow any claim whatever to the substantive. "Sinapis" is very human—indeed, so free from god-like attributes does he seem to have appeared to some, that he has been frequently compared, and even more frequently consigned, to the devil. Dr. Ross's surmise that the B.M.A. has in the past applied a sinapism to "Sinapis" is not correct, nor is it right to assume that because I find a great deal to criticise in one of the many spheres of the Association's activities, I am unable to find a good word for it in any of the others. I am, on the contrary, very willing not only to admit, but even to affirm, that in matters purely scientific the Association has done very good work, and if it were to confine itself to the encouragement of research and the advancement of knowledge there would, in these columns at any rate, be nothing but praise for it.

The B.M.A.

Whatever its original intention may have been, the Association is to-day far more a politico-ethical organisation than a scientific body, and it is from this plank of its composite platform that it now stands and appeals, and it is consequently on this plank that it must be judged. I am not for the moment concerned with the blunders, the *lâches*, the tergiversations which have punctuated its political progress, nor need I further insist upon the brummagem bounce which it mistakes for playfulness, or the suburban sermonising which is its sorry substitute for seriousness. I am merely insisting that as the question at issue refers to its political activities, it is irrelevant to urge that in some other directions there are points which may be counted to it for righteousness. Macaulay says of Charles I., "We charge him with having broken his coronation oath, and we are told he kept his marriage vow. We accuse him of having given up his people to merciless inflictions; and the defence is that he took his little son on his knee and kissed him. We censure him for having violated the Petition of Right; and we are informed that he was accustomed to hear prayers at six o'clock in the morning." The B.M.A. may be possessed of all the domestic and parochial virtues, but its essays in statesmanship have been disastrous.

Mending or Ending.

Dr. Ross complains that I am purely iconoclastic, that my notes lack a constructive policy. If I am to be judged entirely by what I have written about the B.M.A. there is doubtless much truth in this contention. My defence is that by endeavouring to point out the political incompetence of the only existing medico-political organisation, I was trying to persuade my readers that if their interests are to be defended in the future they must look beyond 429 Strand. I may be asked, "Why not mend the B.M.A.?" To this I would reply that, in my humble opinion, for political purposes, it is past mending. It is in the wrong hands. It is only incidentally political. It is neither fish, flesh, fowl, nor good red herring. It is not only incompetent and dunderheaded; it is worse: it is self-satisfied in its incompetence and dunderheadedness. It learns nothing: neither tactics nor manners. It has no settled policy; it is purely opportunist. So far from uniting the profession it succeeds only "in intensifying old animosities and creating new ones." If we are really to be in earnest about meeting the next medical Bill as it ought to be met, we must get rid of this floundering incubus and set up in its stead something which will represent us with dignity, energy and understanding.

The Substitute.

I am not for the moment prepared to say what that "something" should be, but of one thing I am convinced—namely, that it should be a body whose sole *raison d'être* would be political, whose executive would be chosen from among those who have some practical acquaintance with affairs, with the time, experience and energy to defend the large interests of the profession; watchful, far-seeing and resourceful. I hoped, and am still hoping, that the Panel Medico-Political Union will be able so to revise its rules and its views as to open the door to every qualified person, man or woman, in the British Isles, and to extend the sphere of its activities so as to comprise every politico-medical question, whether connected with the Panel or not. A cursory perusal of the rules of Dr. Welply's Union, which I received last week, does not leave the impression of any insuperable difficulty, but on such a question my opinion is valueless.

Medico-Political Union.

Of the letter which appeared from Dr. Welply on page 473 of our last issue, I am free to confess that I do not find it altogether explicit upon the point which, by implication, I put before him. He says that the membership of the Panel Medico-Political Union is open to any duly qualified medical practitioner, but goes on to

admit that the Union "have not, in practice, upheld the candidature of any member of the profession who is not engaged in panel practice; that in the opinion of the Executive "panel matters should only be discussed by panel men, and that an independent organisation is an absolute essential." Whilst I am ready to concede that the interests of panel men are best considered and managed by those directly concerned, I cannot find therein a good reason for a separate and distinct organisation. It seems to me that a body which included all medical practitioners might for executive purposes easily be divided into more or less independent committees, whose findings on points exclusively within their respective departments should be final. There could thus be a Panel Committee, a Tuberculosis Committee, a Health Committee, and the like, each of which would be paramount in its own sphere of influence. *L'union fait la force*, and it would be a grave mistake to multiply defensive organisations at this juncture. The Panel Medico-Political Union seems to me to have the germs of a really beneficent body. But from Dr. Welply's letter it appears obvious that if it is to "man the trenches" it must consent to become more catholic.

Direct Representatives.

In the letter of Dr. John Brown, which appears in another column, our readers will find another and a very important count in the indictment which is growing against the British Medical Association. From this letter it would seem that it is the policy of the B.M.A. to use its machinery for the purpose of capturing the direct representation of the Profession on the General Medical Council. That, of course, is very human, but it is not in the interests either of the profession or the public that it should be tolerated. There are but four direct representatives for England and Wales, one for Scotland, and one for Ireland. Of the other 33 members, five are appointed by the King in Council and the remainder by the various Universities and other qualifying bodies. The bulk of the working members of the profession have thus but six real representatives allotted to them. According to Dr. John Brown these six are now nothing more than nominees of the British Medical Association, a body which, on a generous estimate, does not contain one-third of the profession. This is an additional reason for setting up a new body.

Surgeons and Petrol.

On two successive days in last week the correspondence columns of the *Times*, in two letters, supplied a useful commentary upon the subject upon which, with the customary vigour, "S.O.S." addressed us in our last issue. The first was signed by "One who is obliged to Economise," the gist of which is contained in the following citation: "Last week a luxurious six-cylinder car, containing two ladies, arrived at Harrow for the purpose of buying a small dog." (I did not know that motor-cars bought dogs.) "They had motored from beyond Bristol—130 odd miles at least. And, having bought their dog, returned home the same afternoon. Two hundred and sixty miles, costing in petrol alone quite £3!" The following day there appeared a letter signed "M.D.," in which the signatory says: "I reside in a South Coast watering place which at the present time is full of people using pleasure cars. Personally, although I am surgeon to a large military hospital and have charge of two important departments, I experience considerable difficulty in obtaining petrol. Often I am unable to obtain more than a can at a time, and to-day was told that if I offered £1 for a can I could not be supplied, because the visitors had bought up all the petrol in the town."

It is a grave scandal that doctors, who are not only the least luxurious and—nowadays, at any rate—the hardest-worked members of the professional classes, but admittedly those upon whom the health and well-being of the community depend, should be restricted in petrol when luxurious ladies are allowed to travel 260 miles for the purpose of buying a dog. I wonder how much was paid for that dog, and I wonder, too, how much it will cost these ladies to keep it. There is a good deal of sentimental nonsense talked about the magnificence of women in war time. The nonsense is usually chanted in a shrill advertising treble or intoned with snuffles and unction by the castrates who conscientiously object to men being men and women women; but chant and intone as they will, these people cannot conceal the fact that there are hundreds of women in this country whom the war has not touched in any degree, women who motor and buy dogs, who overfeed and overdress themselves exactly as they did before the war, and who will continue to do these things unless or until they are legally prevented from so doing. When the snufflers and advertisers express surprise at the right type of Englishwoman being ready and willing to do her obvious duty as a woman in a time of national crisis, they are offering the worst insult to the sex which it would be possible to devise. Self-respecting, loyal and patriotic women work because they feel a call to work and not because they hope after the war to use their war services as a lever for obtaining political concessions. If these chanters and intoners would go to France they would see what women who are in earnest will suffer and sacrifice, not for possible reward, but for that real love of their *patrie* which characterises the race. I beg to acknowledge the receipt of a letter from Mr. Eustace Miles on the rather paltry question of his qualifications as a dietetician, with which I may possibly deal next week.

Sir James Goodhart.

The profession will experience a feeling of very genuine regret at the announcement of Sir James Goodhart's death. The loss of his devoted wife a short time since dealt him a blow from which he never recovered, for although he has worked on steadily, he felt, as he recently expressed it to me, that the aching void was increasing rather than diminishing. James Goodhart was a fine type of physician, accurate in diagnosis, resourceful in treatment, helpful in difficulties, sympathetic with the suffering and courteous to colleagues. He was among the few medical writers of his day (they are even fewer now) who had any real sense of literary balance. His writings were always worth reading, if only for their style; but inasmuch as his rich fund of natural humour pervaded everything he wrote, he was one of the most popular, as well as one of the most instructive writers of his time. His little book on "Some Common Neuroses" is one which every medical man should read, especially every young medical man. Guy's Hospital will now add another to the already long list of departed physicians who have contributed to its renown, the name of one who not only in learning, but also in that which is even more important—namely, in character and influence, was really a great and good man.

Sinapis.

CURRENT TOPICS.

The Chair of Surgery in Trinity College, Dublin.

THE appointment of Mr. Edward H. Taylor as Regius Professor of Surgery in the University of Dublin necessitates his vacation of the Chair of Surgery in Trinity College which he has occupied with much distinction since the death of Mr. E. H. Bennett. Hitherto it has been one of the duties of the Professor of Surgery in Trinity College to act as surgeon to Sir Patrick Dun's Hospital, but the present appears to be an opportune time for the Board of Trinity College and the Governors of Sir Patrick Dun's Hospital to consider the advisability of altering this arrangement. There is no doubt that if the candidates for the Chair of Surgery were to be drawn from a class of surgeons who were not already possessed of hospital appointments in Dublin, the allocation of beds in Sir Patrick Dun's to the College professor would be a great advantage to the Board of Trinity College. But, as a matter of fact, the most eligible candidates for the chair are certain to be surgeons who already hold hospital appointments which they are unwilling to give up in order to migrate to Sir Patrick Dun's. The net result, as far as Trinity College is concerned, is that, if the surgeoncy of Dun's is to be still attached to the Chair of Surgery, the field of candidates for the chair will be limited to those who are either too young or of too little standing to have already won hospital appointments. The choice will, in fact, be unduly and improperly limited, to the detriment of surgical teaching in the School of Physic. From the point of view of the Governors of Sir Patrick Dun's Hospital, the advantages of dissociation appear to be equally clear. It is unsatisfactory for the Governors not to be masters in their own house, and not to be in a position to choose their own staff. As things are at present, they have to take most of their staff on the appointment of outside bodies, and they cannot, for example, consider the claims to promotion of their assistant staff. This does not tend either to efficiency or to contentment. We understand that there is no legal difficulty in dissociating the surgeoncy from the chair; the Board of Trinity College and the Governors of the Hospital can make the same arrangement as has been in force for many years in regard to the Chair of Anatomy and Chirurgery. The Professor of Anatomy and Chirurgery is also *ex officio* Surgeon to Sir Patrick Dun's Hospital, but he is not merely permitted, but compelled, to declare that he will neglect his duties as surgeon. The Governors of the Hospital have then the power to appoint a deputy. We hope that a similar arrangement will be made in regard to the Chair of Surgery, if, indeed, the College and Hospital authorities do not consider the present a suitable opportunity for reviewing their relations in their entirety.

The Prophylactic Use of Tetanus Antitoxin.

TREATMENT by prophylaxis is one of the most remarkable advances in medical science emphasised by the present war. The most encouraging results have attended the use of tetanus antitoxin as a prophylactic measure, as the subcutaneous injection of twenty units immediately after the injury almost certainly prevents the development of tetanus. Yet the form of treatment is not by any means ideal. The antitoxin will protect for a short period only, variously estimated as from 8 to 20 days; whereas if administered after injection a delay of a few hours may prove fatal; and again, a repetition of the injection is not generally practicable owing to the danger of anaphylaxis. Professor H. E. Robertson, of Minnesota, has studied the subject in great detail whilst working in the University of Freiburg, and he published a discussion of his results in the current number of the *American Journal of the Medical Sciences*. Having particularly tested the various methods of administration, and having sought to discover the reasons of failure in those cases where the antitoxin has proved ineffectual, he has arrived at the following conclusions:—The antitoxin is far more slowly absorbed than the toxin, therefore it should be administered either intravenously or subcutaneously. If this be impracticable, then a pad soaked with antitoxin and applied directly to the wound will protect if it can be brought into contact with every part of the wound, and if there be no delay in its application. Antitoxin in the form of a dry powder does not protect, for it cannot be absorbed. The only type of case in which this has proved useful is in the prevention of tetanus neonatorum, and this is probably because absorption takes place so much more readily in young subjects. Robertson uses pads previously soaked with antitoxin and dried in an oven, and when required for use moistens them with any sterile fluid, preferably saline, this only as a temporary measure until a subcutaneous injection can be given. The most important cause of failure is the very rapid formation and absorption of the toxin. Donitz injected mice and rabbits with the toxin and came to the conclusion that in cases of severe poisoning the lethal dose of toxin was already combined with nerve structures at the end of five to eight minutes. The combined toxin cannot be neutralised by the antitoxin, hence the urgency in the use of the latter. Cases of delayed tetanus where the incubation period is very prolonged occur from time to time and have not yet been explained. No safe method of active immunisation has as yet been discovered owing to the dangers associated with tetanus toxin. Until this is done prophylaxis cannot be assured.

King Edward's Hospital Fund.

A CHEERFUL note pervaded the speeches at the annual meeting of the Governors and General Council of King Edward's Hospital Fund for London, which was held at St. James's Palace on May 24th, under the presidency of the Speaker of the House of Commons, Mr. Lowther. This was justified abundantly by the reports of both Secretary and Treasurer. In presenting the accounts and balance-sheet for 1915, the Hon. Treasurer, Lord Revelstoke, referred to the fact that the income from investments was over £97,000, the largest ever reached. This was largely due to the receipt of the first instalment of the legacy of Sir Julius Wernher. The Fund held a large amount of War Stock, Treasury Bills, and Exchequer Bonds. His Lordship referred to the munificent bequest, made this year, of the residue of the estate of the late Dowager Lady Wilton. The total was expected to amount to about £150,000, and already the Fund had benefited to the extent of £100,000. The draft report of the Council was presented by Sir Savile Crossley, the Hon. Secretary, and showed total receipts of £226,779, of which £12,949 were contributions to capital. The general account total included a special donation from Sir Ernest Cassel of £28,000 4½ per cent. War Stock.

The report went on to state that the total sum distributed among hospitals, convalescent homes, and consumption sanatoria during the last ten years was £1,484,750. Since the foundation of the Fund £2,098,416 has been distributed. The first million was passed in 1909, the thirteenth year of the Fund.

It had taken six years for the grants to reach the second million. The average annual distribution for the whole period of 19 years has been £110,442. During 1915 the amount spent on administration was £3,205 16s. 1d. The average yearly outlay in this respect was £2,819. The League of Mercy had again contributed £14,000, making a total of £230,000 which it had given to the Fund since 1899. A further £6,300 had been received from the Wernher estate, making a total of £320,015.

The Speaker, replying to a vote of thanks, said he thought they must be prepared to find that, as war continued, the margin of eleemosynary funds available for the general charities of the country would shrink to a considerable extent.

Our readers will agree that the report is a very satisfactory document, and we trust this great charity will continue to receive the large measure of support it requires for the proper discharge of its onerous duties.

Indian Medical Appointments.

It was recently announced in the Press that after the open competitive examination held last July for admission to the Indian Medical Service, no similar examination would be held during the continuance of the war, but that such appointments as might be required to meet the absolutely indispensable needs of the Service would be made by nomination by the Secretary of State. To assist him in making these appointments which, as already announced, will be limited in number to the absolutely indispensable needs of the service, Mr. Chamberlain has appointed a Selection Committee who will summon and interview such applicants as may appear to be *primâ facie* suitable, and make recommendations for appointment. Applications for appointment should be addressed to the Secretary of the Military Department, India Office, Whitehall, London, and should contain concise particulars of the applicant's medical degrees and career. Applicants must be over 21 and under 32 years of age at the time of application. Particulars regarding pay, promotion, etc., in the Service can be obtained from the Secretary, Military Department.

Rest.

Stanley Abbot, of Massachusetts, estimates that 20 per cent. of insane persons become so from want of rest of body, or more particularly of mind. Moreover, in the same percentage, he believes a series of prodromata to obtain, easy of recognition, and most imperatively to be obeyed. These vary, in the one case manifesting themselves as an inexplicable and ingravescent laziness in a subject heretofore conspicuous for industry; in another, functioning paradoxically to produce a feverish appetite for work, combined with a strong distaste for any form of inactivity, physical or mental, and a belief that hours spent in all forms of suspension are criminal. He further disputes the prevalent opinion that change of occupation constitutes recreation; such a belief of itself implies an incapacity truly to rest. Study of the healthy child tends to confirm such conclusions. It is a matter for much marvel how a boy will contrive to pass an entire day frequently employed in doing practically nothing, yet will retire to bed at night with an astonishing avidity for sleep and a profound sense of a well-spent twelve hours. The commonly deplored slackness of the young adolescent may, in this light, be an instinctive conservative process. Such individuals, when placed *in medias res*, frequently display much acuity and promptness of mentality, a striking contrast to the jaded conclusions of the overworn. Abeyance of all function save the essential is to be seen even in such temperamental beings as birds—over prolonged periods. The generations become more and more "troubled about many things," drifting further and further from what has been styled "the eventual element of calm."

Minor Cases.

Study of the clinical assortment constituting an extern surgical-dressing department is not devoid of instruction. Frequently, from the lack of continuous or systematic treatment, the absence of control over the patient's domestic circumstances, together with the necessity of cramming, it may be a hundred cases, into the space of a few hours—such so-called minor cases come to assume an inexorable chronicity and refractoriness which cause them to become of truly major importance. A neglected or mistakenly opened whitlow lacks the dramatic clinical urgency of an acute osteomyelitis. But its effects, resulting from faulty drainage or imperfect immobilisation, are deleterious and debilitating to a degree. Moreover, in cases where such departments are administered by resident officials in turn, from day to day, continuity of treatment, as regards the therapeutics employed, is not exercised. We have ourselves experience of one case of obscure chronic ulceration of the lower extremity, which had presented itself at the extern department for a period extending over seventeen years, without a cure being effected. Yet so great is the demand upon the hospital accommodation for cases of immediate or vital urgency, that these poor lesser pathological fry must perforce remain where they are.

PERSONAL.

Sir Arthur Chance has been elected Consulting Surgeon to Dr. Steevens' Hospital, Dublin, in room of the late Sir Charles Ball.

On June 23rd, Sir John Bland Sutton will deliver the Cavendish lecture of the West London Medico-Chirurgical Society at the West London Hospital.

The appointment is gazetted of Surg.-General Sir William Babtie, V.C., K.C.M.G., C.B., M.B., K.H.S., to be a Director of Medical Services at the War Office.

Deputy Surgeon-General D. J. P. McNabb has been appointed to the Medical Department, Admiralty, as Deputy Director-General, and Fleet Surgeon J. F. Hall has been appointed to the Medical Department, Admiralty, as Assistant Director-General.

The President and Council of the Royal Society have awarded Miss Dorothy Dufton, of Girton College, Cambridge, the first year's income of their Lawrence Fund for an investigation of pneumonia produced by poisonous gases. The income of the Lawrence Fund is devoted to research in the relief of human suffering, and amounts to about £160 per annum. Miss Dufton is the daughter of Dr. S. F. Dufton, Inspector of Schools in Leeds, and is at present doing research work in Cambridge University Physiological Laboratory.

Commissioners under the Military Service (Civil Liabilities) Act for making grants to men on service are being appointed, and will enter upon their duties almost immediately. Dr. Tinsley Lindley has been appointed to act as Commissioner for the whole of Nottinghamshire, including the city. The duty of the Commissioner is to investigate applications for assistance, to satisfy himself as to the accuracy of the statements made by the applicants, and to report, with recommendations, to the Central Committee.

FRENCH CLINICAL LECTURE
ON
TUBERCULOSIS OF THE FOOT.*

By PROFESSOR KIRMISSON, M.D.,

Of the Faculty of Medicine of Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

HERE are two small boys with tuberculous mischief of the bones of the foot and dorsum, an affection which is very common in general practice and with which therefore it behoves us to be familiar. The disease presents itself in various clinical types, as I shall explain in the course of my remarks.

The first of our little patients is eight years of age and his family history at once suggested the possibility of tuberculous mischief inasmuch as his father is a "cougher," as is also the patient himself. He was born prematurely at the eighth month of pregnancy and had a bad attack of enteritis when seven months of age. The trouble in the foot set in about three months since with swelling in the region of the right malleolus. This seems to have come on without any known cause, there being no history of previous injury, and it was not accompanied by any pain or functional impairment.

The skin over the swelling is normal, presenting no redness or thickening or tendency to adhesion. The swelling is oval and is situated in front of the tibial malleolus. It measures an inch and a half in length, is of soft consistency and is slightly tender on pressure. The movements of the tibio-tarsal joint are intact, and on making him lie down we see at once that the two retro-calcanean hollows are free. It follows that the lesion does not involve the articulation, a point to which I shall have occasion to refer later on. Lastly, to complete our examination, we must note the presence of an enlarged gland at the apex of Scarpa's triangle and an expiratory murmur over the fourth dorsal vertebra, indicating the existence of tracheo-bronchial adenopathy. You will see then that there is no limitation of movement or displacement of the foot, and that the swelling is unilateral.

It is to be remarked that a few hours' rest is followed by noteworthy diminution of the size of the swelling, a circumstance usually met with in cases of this kind.

The symptoms then point to the existence of osteitis involving the external malleolus. In view of its insidious onset, its essentially chronic course, without any constitutional or local reaction, we have no difficulty in arriving at the diagnosis of osteitis of tuberculous origin.

I must point out, however, that the chronic course of a given case of osteitis is not *per se* proof of its tuberculous nature, for there are many forms of osteomyelitis which are essentially chronic *ab origine*. These affections, which are in no wise related and have nothing in common with tuberculosis, were first adequately described by Trélat. I met with a case of the kind about four years ago in a young man, 26 years of age, who had served in the cavalry. This patient had suffered for a long time from trouble in his right foot, and as he had never had any sharp pain or fever it was thought to be tuberculous. He was operated upon and we came down on an abscess, the pus from which on cultivation showed staphylococci. It was a case of osteo-myelitis of the internal malleolus, chronic *ab origine*. In this case the radiograph shows very distinctly a white patch indicating the presence of an abscess.

The other little patient, six years of age, born at term of healthy parents, brought up on the bottle, has had measles, small-pox and diphtheria, and every winter he has a cough.

A fortnight before admission his mother noticed that his foot was turned out in valgus when he walked and there was a swelling on the inner side. There is deep-seated thickening in the region of the medio-tarsal articulation, and twisting the foot causes some pain. The tarso-metatarsal joint, on the contrary, is free from pain and tenderness. Lastly, there are several glands in Scarpa's triangle as well as in the cervical and axillary regions. In this child the lesion is situated in the second row of the tarsus on the inner side, and I shall explain shortly why this should be the preferential seat of tuberculous osteitis.

The diagnosis of lesions of the tarsus and dorsum of the foot is based on two considerations, *viz.*, the nature of the osseous lesions and their distribution. The nature of the lesions is inferred from the clinical appearances, more particularly their pasty fungous consistency and the discovery of enlarged glands. You are aware that coxalgia is accompanied by the presence of enlarged glands in the internal iliac fossa and, similarly, tuberculous osteitis of the knee and foot are almost always associated with glands in Scarpa's triangle.

The course of the disease might lead us astray because there are forms of osteomyelitis which are chronic *ab origine*, while, on the other hand, tuberculous osteitis sometimes runs a hyperacute course. I can recall a case of coxalgia which started with a temperature of 105° F. Nevertheless a slow, chronic, insidious course militates in favour of tuberculosis. Another argument in favour of this diagnosis is the discovery of tuberculous lesions elsewhere.

The second part of the diagnosis, based on the situation of the lesions, infers exact anatomical knowledge. Tuberculous lesions of the dorsum and tarsus are specially apt to occur in three spots, *viz.*, the tibio-tarsal articulation, the posterior half of the tarsus (astragalus and calcaneum) or in the anterior half. In adults and in elderly persons all these joints may become involved simultaneously.

In determining the exact seat of the mischief we must take into consideration the site of the swelling. If the swelling is in the region of the malleoli, it is a case of malleolar osteitis involving the tibia or the fibula as the case may be. If behind the malleoli it may be a case of synovitis, but though it is common enough in adults for the synovial sheaths to be involved, it is much less frequent in children. Nevertheless, last year I came across a case of tuberculous synovitis in the sheath of the tibialis anticus in a girl.

The swelling may be unilateral or bilateral. This enables us to distinguish malleolar osteitis from tibio-tarsal arthritis. In presence of

*Delivered at the Paris Hospital for Sick Children.

arthritis the fungous outgrowths tend to project between, in front of and behind the malleoli, because the joint is bounded laterally by the malleoli and the strong lateral ligaments, and in front by the tendons of the tibialis anticus, the extensor proprius pollicis and the extensor digitorum communis.

Tibio-tarsal arthritis then is manifested by two lumps separated by the tendons of the anterior part of the leg and behind by the two fungous masses on each side of the tendo Achillis. In these cases, moreover, the movements of the joint are limited and the foot assumes a faulty position intermediate between flexion and complete extension. The foot tends to fall and, after a time, retraction of the tendo Achillis leads to permanent equinism in a certain proportion of the patients.

I should add that in most instances changes in the astragalus characterise the onset of tibio-tarsal tuberculous arthritis. These changes, however, do not necessarily involve the joint. The astragalus is made up of two segments, the astragaloid pulley which forms part of the articulation, and the head of the astragalus, which is outside the tibio-tarsal joint and belongs entirely to the articulation of the first and second rows of the tarsus. The head of the astragalus may likewise be the seat of tuberculous mischief.

Tuberculosis, however, displays a marked preference for the calcaneum. This seat is recognised by the swelling in the depressions on either side of the bone and ultimately by reddening of the skin and fluctuation.

In some instances the disease involves the second row of the tarsus as in our second case. In this event the lesion usually affects the point of maximum movement, *viz.*, the internal half (scaphoid, articulating with the astragalus and the three cuneiform bones, the latter articulating with each other). This remark applies to lesions of the elbow which tend to involve the external aspect (centre of the movements of flexion, extension, pronation and supination).

Apart from the seat of the swelling, we must investigate the movements in endeavouring to determine the seat of the lesions. The movements of the tibio-tarsal joint are especially flexion and extension, and it is limitation of these movements that is met with in tuberculosis of the tibio-tarsal joint. The movements of abduction and adduction belong to the sub-astragaloid articulation, and those of twisting to the medio-tarsal joint.

Treatment.—Speaking generally, it may be remarked that tuberculous disease of the foot and dorsum is among the least unfavourable forms, because it has a tendency to yield to conservative treatment, and when this fails it yields readily enough after operation. The prognosis is certainly better than in tuberculous arthritis of the elbow or knee or in coxalgia.

When the patient comes to us with the foot in a faulty position, the first thing to do is to restore it to its normal relationship with the leg. This can sometimes be done by mere reposition, but it may be necessary in certain cases to divide the tendo Achillis, after which the foot must be maintained in a proper position by means of a light plaster splint, leaving the lesions as far as possible uncovered.

When the patient comes with abscess formation, as in these two cases, the usual practice is to have recourse to deep ignipuncture, a method which is of veterinary origin, and has only become safe and useful since the introduction of asepsis and the thermo-cautery. The patient is anæsthetised, and, having sterilised the skin, we make thirty or forty stabs with a fine platinum cautery needle into the swelling.

In presence of suppuration, we must deal with the case as we should with an abscess of whatever origin—by puncture, followed by the injection of iodoform ether. In more advanced cases tunnellisation of the astragalus gives excellent results. Partial and total tarsectomy generally prove successful. Patients treated in this way usually walk well, provided we take care to keep the foot at a right angle with the leg.

ORIGINAL PAPERS.

ATROPHODERMIA RETICULATA SYMMETRICA FACIEI.

By GEORGE PERNET, M.D.,

Dermatologist to the West London Hospital and Lecturer on Dermatology, West London Post-Graduate College.

This is a condition which has apparently not been described (I am open to correction), and to which I have given the above descriptive name as a provisional label, but I have no doubt that it has been observed by others. Indeed, I have seen one or two examples of it myself, but as it is uncommon in my experience I have thought it advisable to christen the condition in order to call attention to it. Perhaps readers of this journal in general practice may have seen similar cases. This skin affection, being more or less a trivial one, may well pass unnoticed or not be troubled about when seen. As regards the present case, I am indebted to Mr. Oswald L. Addison, who has the patient under his care for

scoliosis, for sending the child on to my department as something a little unusual from the skin point of view.

The patient is a girl, aged 12½, and, according to the mother, there was nothing the matter with the skin, which was good, until she had measles very badly at the age of four. As a sequela, the skin of the face became rough and remained so until about a year ago, when the two cheek areas began to take on their present appearances. There has never been any sign of ulceration or pustules about the affected areas. Last Christmas (1915) the child had an attack of German measles, but the eruption was not at all bad on the face. Cold winds made the areas red. Nothing had ever been applied to them in the way of treatment.

The affected areas of the cheeks are roughly triangular and more or less symmetrical, not strictly so in the Euclidean sense, but sufficiently to be described in that way for our purposes. The distribution is shown in the reproduction from a a photograph.

The parts are slightly reddened and have a honeycombed appearance. On close examination with a lens a superficial atrophy of the skin can be made out. The picture is that of a fine net-work, the meshes of which form a raised, delicate tracery enclosing slightly depressed atrophic areas. At the borders of the patches small pin-point depressions could be seen. The slight, blushy redness is due to a certain amount of telangiectasis here and there, especially about the margins of the affected areas. With the exception of a slight degree of xerodermia about the legs, the patient's skin generally is good.

The condition is admittedly a somewhat trivial one in itself, though in a girl and situated on the face it has its importance from the æsthetic point of view. La Rochefoucauld has said that: "Nous avons tous assez de force pour supporter les maux d'autrui," but a young woman with a blemish of this kind would consider it under a very different angle, and would not be as philosophical about it as the detached onlooker.

THE MEDICO-LEGAL ASPECT OF GUNSHOT WOUNDS.

By J. C. McWALTER, M.D., LL.D., R.A.M.C.

EVEN doctors sometimes pray. Not often, perhaps, or for long. And on occasion they ask pardon for offences. One of the crimes of which they are often guilty is to swear, boldly and confidently, what is not true. One means that medical men make statements on oath which they doubtless believe to be true, but which are really founded on assertions embalmed in text-books originally written forty or fifty years ago. Such teaching was possibly true at one time and under certain conditions which then prevailed. Such assertions ought no longer to be seriously made in the Courts unless they are within the personal knowledge and experience of the witness, or have been checked or verified by recent observations.

Startling statements are sometimes made in our Courts about gunshot wounds. These have become unpleasantly familiar in Dublin of late, and it is desirable to review them from the point of view of medical jurisprudence.

It is stated in text-books and sometimes sworn in Court that the wound shown on the dead man cannot have been fired at close range, because there was no charring of the clothes or of the surface of the wound. Clearly it may be a matter of life and death for an accused person to prove whether a fatal shot was fired at close or distant range, and it is well, therefore, to be accurate in one's statements.

I have quite lately examined cases of fatal gunshot wounds, where the firing was at close range, and in no case was there charring either of the clothes or the skin. I think the statements about charring were true in the old gunpowder days, but that it never occurs in modern rifle firing with modern ammunition.

One ought, of course, to be very guarded in making dogmatic statements, and one must give as accurately as possible the conditions under which one's observations were made.

The cases which I examined were seen by me from half an hour to two hours from the time of death. The weapon was the ordinary service rifle, and the ammunition the ordinary Mark VII bullet —also called 7·7 m.m., or .303 gauge. They occurred within the limits of a room, probably nine feet.

It must be noted that the appearance and characters of a gunshot wound will vary according to such a variety of circumstances that it is most difficult to determine everything from mere *post-mortem* examination. The wound will vary not only with the weapon—revolver, rifle, carbine—but also with the description of ammunition—its bore, .275 or .303 —or with the flat-pointed German bullets described as Dum-Dum, or if by some of the Italian ammunition. The size, shape and composition of the bullet, and the explosive—whether it be gunpowder or one of the modern high explosives, and the part struck, whether bone or soft tissue, will, of course, modify the result. The velocity of the projectile will depend partly on the explosive and partly on the distance, and will also influence the result.

The nature of the gunshot wound will vary, therefore, with the part of the body struck, with the shape and even position of the missile, with the obstruction met with in the course of the bullet, with the nature of the explosive, and with the degree of velocity.

Old-time traditions of the text-books that a gunshot wound fired at close range exhibited blackening and charring of the clothes and of the wound merely lead one astray. The most reasonable tradition was that the wound of entrance was small and inverted, the wound of exit large, jagged, and everted. Caspar, whose work is such a storehouse of knowledge on the questions of medical jurisprudence, long ago doubted this teaching, and even asserted that in certain instances the wound of entrance was large and that of exit small.

In my experience with modern rifle bullets, Mark VII, at close range, the wound of entrance and the wound of exit are alike small, without any charring or marked inversion or eversion, when the shot goes through the hand or wrist. Where the shot penetrates the thorax, from before backwards and obliquely, the wound of entry is small, very slightly inverted, with no charring and no external sign of hæmorrhage. The wound of exit is large, approximately triangular, and with little or no eversion, and very little hæmorrhage. It is rather more like a bayonet wound.

There is no sign of charring on the clothes, either at entrance or exit. They look as if slashed with a sharp knife. There may be no sign of blood on the torn clothes over the wound of entry.

One constantly reads about the danger of bullet wounds from the particles of clothing carried into the wound. I doubt if particles of clothing are ever carried in, unless by stray bullets. The clothing, in the cases I examined, was simply cut aside out of the way by the velocity of the bullet, and showed no indication that any part was carried in. Copious internal hæmorrhage determined death. The quantity of blood that flows out of the wound of exit some time after death is very great.

Where death occurs from heart wounds there is, I think, generally an expression of anguish. Where the fatal injury has occurred to the brain, the face may be stereotyped into a smile, a stare of anxiety, or of grim resolution. Death from a head-wound may be so rapid that it comes on before the stricken man can even fall.

THE QUEEN has sent a cheque for £100 as a contribution to the funds of Queen Mary's Royal Naval Hospital, Southend-on-Sea. Her Majesty has expressed the hope that the excellent work of the hospital may meet with the full amount of success which it deserves.

AN INVESTIGATION OF THE ASH OF FÆCES.

By WILLIAM PARTRIDGE, F.I.C.

The composition of fæces varies greatly in health and enormously in sickness. This is partly due to the fluctuating content of water, which in specimens examined by the author has ranged from 56 per cent. to 97 per cent. If analyses are made on the residue left on drying, some semblance to constancy in composition can be distinguished in certain directions. The fatty constituents and the mineral matter, for example, often approximate to the average figures given for them.

Little information appears to be available about the content of ash. The inorganic constituents of the average composition given by Way total 11.48 per cent. on the moisture-free specimen. *Evans' Journal* (April, 1914) puts the normal figure at 12 per cent. An author, whose name I have not got, says it ranges from 10 per cent. to 15 per cent. in normal specimens.

Several authors mention an increase in ash in catarrhal inflammation of the intestine, and a still greater increase, to an average of 25 per cent. (Evans), in chronic colitis. The diminution of ash on a meat diet and an increase on a milk diet have been noted. Eric Pritchard comments on the extraordinarily high amount of calcium found in the fæces in rickets: "As much as 25 per cent. of the dried residue of an infant's motion is often found to consist of the lime base."

The fact that the fatty constituents may differ widely in amount, suggested these to have perhaps an important influence on the content of ash, when they differed much from the normal. Variation in the content of soap cannot appreciably affect the percentage of ash, as the proportion of mineral matter in the soaps that occur in fæces (calcium and magnesium oleates, stearates, and palmitates) is about the same, when reckoned on the soap, as the proportion of normal ash reckoned on the dry fæces. An instance of this occurs in specimen No. 8 in the following table, where fatty acids to the extent of 32.9 per cent. of the dry fæces were combined with metallic bases as soaps. Yet the figure for ash is normal. The case is different with fatty acids in the free state, and with fats. When these are present in excessive quantities, they automatically reduce the percentage of ash by a process of dilution. Conversely, when these fatty constituents diminish, the ash rises in inverse proportion.

As all the specimens dealt with below were from persons who were either ill or supposed to be ill, disturbing factors are likely to be frequent. All the same, the tabulated results show the tendency of the ash figure to rise as the content of fatty acid *plus* neutral fat diminishes. Nevertheless, as the normal figure for fatty acid and neutral fat only averages 15 per cent., even considerable diminution in them will only raise the ash content slightly, and the factor becomes of no consequence when high ash figures are reported.

The water content bears no relation to the ash in these specimens.

In the table the moisture is, of course, reckoned on the fresh native specimen, while the totals of fatty acids and neutral fats are, like the ash, stated on the moisture-free residue.

No.	Ash.	Free Fatty Acids plus Neutral Fats.	Moisture.
1	8.3	53.4	56
2	8.4	39.6	97
3	12.0	42.4	85
4	12.3	11.7	88
5	12.7	17.7	81
6	12.8	22.5	74
7	14.3	18.7	87
8	14.5	26.2	75
9	14.8	14.5	86
10	15.0	11.9	83
11	16.3	20.1	80
12	16.6	18.5	67
13	17.0	30.0	80
14	18.4	13.0	82
15	22.3	7.5	76
16	22.5	9.4	89
17	22.7	11.2	79
18	29.2	11.2	94

A BROADER VIEW OF TABES DORSALIS.*

By FRANK R. STARKEY, M.D.,

Philadelphia, Pa.

The development of our knowledge of tabes has been a matter of slow evolution since Duchenne casually alluded to the frequency of syphilis and demonstrated involvement of the posterior columns of the cord in tabes. The cause was a matter of dispute. Leyden declared chill to be the most common and probably the only cause. Duchenne was of much the same opinion, but he and Wunderlich pointed to overexertion, fatigue, and sexual excess as probable causes. Wunderlich also suggested that concussion of the spine might be a causative factor. Erb was the first to lay especial stress upon syphilis as the essential cause of tabes, and he was ably supported by Fournier among the French, and Möbius and his colleagues of Leipsic sustained him fully in this view. Möbius, with much emphasis, declared: "Without syphilis there is no tabes." Erb substantiated his opinions by a long series of tables of cases showing that syphilis was undoubtedly present in a vast majority, if not in all persons who developed tabes, but he believed it was a parasyphilitic disease due to the influence of toxins rather than the actual invasion of the cord by the syphilitic germ. As late as 1911 Oppenheim gave voice to the following: "We are by no means justified in regarding syphilis as the *conditio sine qua non* of tabes, as Brassand, Babinski, and others do. Tabes is further not a syphilitic disease in the pathologic-anatomical sense. The pathological changes have nothing in common with the well-known lesions of visceral syphilis, although Erb does not admit it. It is nevertheless conceivable that syphilitic cachexia is the result of poisonous chemical substances produced in the organism which bring about simple degeneration in certain portions of the nervous system. Those suffering from tabes seldom present any constitutional sign of syphilis." So it will be seen that at no time has there been an unanimity of opinion concerning the ætiology or pathology of tabes, and that some of our most learned neurologists and pathologists clung to views that we now believe to be entirely untenable. The discovery of the spirochæte in the cord tissues by Noguchi and Moore in 1913 placed an entirely different light on the whole matter, and it is now generally accepted that in tabes there is an actual invasion of the tissues of the cord by the spirochæte. We have, however, adhered to the histological picture of a cross section of the cord in our conception of this disease, and accepted the teachings of our forefathers, who considered it solely a systemic degeneration of the posterior columns.

We must now go beyond this very circumscribed view, for it by no means gives us an ample con-

* *New York Medical Record*, March 4th, 1916

ception of tabes in its broader sense. In view of our present knowledge of the glands of internal secretion and of the automatic and sympathetic nervous systems and the relation of the endocrinous glands thereto, we are now able to explain many mysterious phenomena of tabes which could not be accounted for solely by degeneration of the posterior columns of the cord. The nuclei of the vegetative system are so intimately associated both in the brain and the cord with those of the sensorimotor system that is impossible to separate them. The autonomic and sympathetic nervous systems are unquestionably under the control of the glands of internal secretion, and if we study their embryonic origin we shall find that the origin of the chromaffin system, the sympathetic nervous system, and autonomic and central nervous systems is closely associated. The reproductive organs are also closely allied in this relation.

It may be well for us to pause for a moment and view the distribution of the autonomicosympathetic system (for the sake of brevity counting them as one). The autonomic supplies the muscles of the iris, ciliary muscle, and orbital muscle (disturbance of this would account for Argyll-Robertson pupil), heart, blood vessels of the mucous membranes of the head, walls of the gut from the mouth to the descending colon, also the gastric glands, liver, and pancreas. The sympathetic, from first thoracic to second lumbar, supplies muscles, glands, and vessels of the skin, vessels of the gut from mouth to rectum, blood-vessels of the lungs, abdominal viscera, arteries, skeletal muscles, spleen, urethra, and internal generative organs. The autonomic, from second to fourth sacral, supplies arteries of rectum, anus, and external generative organs, also walls of bladder and descending colon. A lesion here would account for bladder phenomena, impotency, incontinence of urine and fæces, so common in tabes. Other frequent findings in tabes which can be accounted for by disturbance of the autonomicosympathetic system are muscular atrophy, which in tabes does not follow the course of any particular nerve, but occurs in large groups of muscles, frequently unilateral tabetic arthropathies (Charcot joint), perforating ulcer of the foot, or of the mucous membrane, occasionally with gangrene, somatic disturbances of general nutrition, disturbances of nutrition of hair, skin, and nails, and aortic disease, manifesting itself in insufficiency or aneurysm. Cardiac crises and vascular crises have been described by Pal; these crises frequently resemble angina pectoris—a feeling of oppression about the heart with arrhythmia, bradycardia, tachycardia, bradypnœa, and glycosuria, common in association with paralysis of the vagus in pituitary involvements and in tabes. Oppenheim describes a case of tabes which was marked by unilateral total paralysis of the vagus. When we remember that the vagus supplies the pharynx, larynx, lungs, heart, œsophagus, abdomen, intestines, and the fundus of the external auditory meatus we shall at once be able to account for the analgesia of the pharynx, laryngospasm, œsophagospasm, intestinal and gastric spasticity, and disturbances of the auditory tract. With the autonomic and sympathetic, like the glands of internal secretion, there is a normal equilibrium maintained in health, but in the case of the autonomic and sympathetic this balance is established by a normal antagonism between them. Stimulation of one abolishes the action of the other. The adrenal is the natural stimulator of the sympathetic, and although we cannot definitely establish it as yet, the pituitary and sexual glands are probably the natural stimulants of the autonomic, for vagotonia is conspicuous in sexual neurasthenics and at the climacteric. Although the fibres of these two systems are so closely related that is is impossible to differentiate them anatomically, we can readily influence each system separately by the use of adrenalin for the sympathetic or pilocarpin, atropine, muscarine, or a number of other vegetable substances for the autonomic.

We may summarise the symptoms which we commonly find in disturbances of the glands of internal secretion, the autonomicosympathetic system, and tabes, as follows: Disturbances of nutrition involving skin, hair, nails; blue, swollen, or gangrenous skin or mucous membrane; atrophy of large groups of muscles, not following the course of any particular nerve; perforating ulcer of the hand or foot; profuse sweating; neurasthenia; arrhythmia, and other disturbances of the circulatory apparatus; disturbances of respiration; glycosuria; visceral crises; analgesia of pharynx; pharyngeal, laryngeal, œsophageal, and pyloro-spasm; spasticity of stomach or intestines; splanchnic congestion; hyperalgesia of the abdomen; Argyll-Robertson pupil, and disturbances of the sexual organs. We must not expect to find all of these symptoms or signs of involvement of the glands of internal secretion and of the sympathetico-autonomic system in each individual case, any more than we expect to find all of the classical features of typhoid fever in every case of that disease, but a sufficient number of these signs are constantly present in all cases to prove the point at issue.

Arthropathies can be most rationally accounted for as a trophic disturbance through the sympathetic. There is absolutely nothing to differentiate microscopically the cord of a case of tabes showing arthropathies from one in which they are not present, and there is certainly nothing in common between the Charcot joint and ordinary syphilitic arthritis, nor is there the slightest pathological difference in the cord of a tabetic patient with Argyll-Robertson pupil from one with normal pupil, yet we know positively that the Argyll-Robertson pupil may be absent in tabes, and that lesion of the sympathetic will produce it. Eloesser produced Charcot joint by traumatising a segment whose posterior roots had been cut.

I believe that we should consider the treatment of tabes as separate from syphilis, not attempting to deny the syphilogenesis of the disease, and this in my opinion can be accomplished best by organotherapy. (See Starkey: "Glands of Life.") I think it is not always wise to treat the patient for syphilis, but rather, in selected cases, to treat the tabes separately. I wish to make it very clear that I do not make the slightest claim that organotherapy can cure syphilis, but tabes is not syphilis. It does, however, seem to act as a sensitiser and increases the phagocytosis or formation of antibodies, the patient's resistance is increased and he responds more promptly to antisyphilitic treatment when used in conjunction with organotherapy. I want to emphasise that in many cases of tabes where the syphilis seems to be dormant or quiescent it is better to allow the syphilis to sleep rather than to arouse it to a state of activity by antisyphilitic treatment. Such cases when treated by salvarsan or even the mercurials frequently show marked exacerbations, due to the setting free of enormous quantities of toxins or the liberation of the spirochætes which have been encysted, and do not improve under further antisyphilitic treatment. Since the advent of salvarsan and the vigorous treatment of the primary stage of syphilis incident thereto the percentage of luetics showing early nervous involvement has been dis-

tinctly increased. Our experience seems to show that when the disease is attacked in a vigorous manner in the early stages and the secondary stage prevented or aborted, the liability to early and severe nervous phenomena is increased. It would seem that where the infection spends itself by severe secondary phenomena its virulence is attenuated and the liability to involvement of the nervous system is distinctly lessened. The German aphorism: "syphilis does not die but only sleeps," I believe to be applicable here, and when it is in a sleeping or quiescent state it is decidedly safer to let it sleep in these old cases. I have at present under my care a gentleman, 76 years of age, who contracted syphilis fifty years ago and received the rather indifferent treatment in vogue at that time. He has shown no manifestations of syphilis whatever since, until three years ago, when slight numbness of the feet with paræsthesia over part of the thoracic region and a rather marked myosis developed. He has absence of knee jerk and a two plus Wassermann. This myosis may be due to his age. He shows absolutely no other signs of syphilis, and I believe that to institute antisyphilitic treatment in this case would be a grave error.

The question of why a very small percentage of those infected with syphilis acquire tabes, while the vast majority do not, has been puzzling one for many years and numerous very ingenious attempts to explain it have been made. I believe that it can be most rationally explained by assuming a constitutional inferiority involving primarily the glands of internal secretion, the pituitary in particular, and the consequent perversion of its secretion which is poured directly into the cerebrospinal fluid. It may be that when this gland is involved and its secretion perverted it acts as an irritant to the tissues of the cord, making them vulnerable to the invasion of the spirochæte, or again the sympatheticoautonomic system, which presides over nutrition, may be originally involved in these patients and their vulnerability thus increased. This seems to be more rational than to believe that a special organism exists which creates tabes only. Certain strains of germs have been shown to have selective predilection for certain tissues, but this can be developed only by passing them through a number of individuals with a definite disease, and this particular phenomenon has never been demonstrated with the *Spirochæta pallida*. It has been shown that certain prostitutes leave numerous victims of tabes in their wake, but these instances are so rare as to be of little assistance in answering this question.

The following rather typical cases are cited not for the purpose of showing the results of treatment, but solely to illustrate the connection between the glands of internal secretion and tabes.

Case I.—Female, æt. 45, married, one child. Family history: unimportant. Previous history: unimportant, except scarlet fever in childhood. Denies venereal disease. Seven years ago first noticed difficulty in walking in dark and numbness of feet; ataxia gradually developed until patient was unable to walk without assistance, then arthropathies (Charcot joint) developed in knees, which necessitated the use of crutches; for past three years unable to stand unassisted, compelled to use wheel chair or crutches, complains of stuffy feeling, shortness of breath. Examination: medium height, quite obese, brown hair, gray eyes, puffy face, myxœdematous appearance, unable to open eyes widely, palpebral fissure, narrow, slight external squint of right eye, skin and hair dry and harsh, subcutaneous tissue firm to pressure, entire body, especially legs, swollen in appearance but does not pit on pressure, marked hyperextension of knees making it impossible to stand, temperature 98.6°, pulse 65, abdominal and thoracic viscera normal, Argyll-Robertson pupil, loss of knee jerk, blood pressure 120 mm. Wassermann three plus. This patient presents a typical picture of thyroid insufficiency. An orthopædic appliance for one leg was prescribed and organotherapy instituted. At the end of twenty days was able to stand and walk unassisted with hands behind back. The swollen appearance of body greatly lessened, legs so reduced in size, readjustment of brace was necessary, crutches and wheel chair entirely dispensed with.

Case II.—Male, æt. 55, chemist. Family history: father died of diabetes, otherwise negative. Previous history: ordinary diseases of childhood, chancre twenty years ago, first noticed difficulty in walking ten years ago, a tendency to fall, lightning pains in extremities and gastric crises, diplopia then developed, was treated by ordinary methods of syphilis and received ten injections of salvarsan which caused diplopia to disappear and lessened gastric crises for a time. These pains, however, returned with usual severity. Examination: fairly well developed male, 5 feet 10 inches, dark complexion, coarse hair, prominent eyes, large lips, high cheek bones, large jaw, angular conformation of body, prominent sacral parts, large hands and feet, skin cold and clammy to touch, perspires profusely on slightest exertion, decidedly neurasthenic, tendency to muscular atrophy in large groups of muscles in arms, shoulders, back and legs, very ataxic, Argyll-Robertson pupil, knee jerk absent, examination of thorax elicits aortic insufficiency otherwise negative, dulness in percussion over entire abdomen, splanchnic congestion (evidence of vagotonia), temperature 97.5°, pulse 60, blood pressure 100 mm. Wassermann negative. I believe this patient to represent hypopituitarism and hypothyroidism secondary to hyperpituitarism and hyperthyroidism. This is further borne out by the prompt response to organotherapy. Within one week patient's temperature was normal, pulse 72, blood pressure 120 mm., and within two weeks was able to walk a chalk line without perceptible ataxia. Continued to improve under further treatment.

Case III.—Man, æt. 45, occupation, retired, married nine years, no children. Family history: negative. Previous history: ordinary diseases of childhood, including scarlet fever and diphtheria, syphilis eighteen years ago, treated vigorously, did not develop secondary eruption, first noticed tingling sensation in feet nine years ago, which extended to legs and arms, walking became difficult one year later, and manifested difficulty in starting urine about this time. Present condition: walks with cane and assistance of nurse, decidedly ataxic, complains bitterly of lightning pains in legs, arms, and stomach, partial incontinence of urine and fæces, entirely impotent. Examination: Tall, light complexion, prominent eyes, wide palpebral fissure, rather slender, delicate features, tapering fingers, very little hair on body, small bones, fine hair, skin cold and clammy, complains of cold, perspires easily, complains of choking in attempting to drink due to pharyngeal spasm, decidedly neurasthenic, pulse 70, blood pressure 90 mm., temperature 98°, Argyll-Robertson pupil, loss of knee jerk. This patient is undoubtedly one of hypopituitarism of the second classification. I saw him only twice, and was unable to make a complete study or note results of treatment.

Case IV.—Male, æt. 60, occupation, brewer. Family history, unimportant. Previous history, ordinary diseases of childhood, typhoid fever at eighteen, denies specific infection: first noticed diplopia twelve years ago, then uncertainty in walking, especially in the dark, pains in arms, legs, and various parts of the body, treated for rheumatism, developed girdle sensation, vision became impaired six years ago, now totally blind, walks with wide base but little ataxia, however, makes very little attempt to walk unassisted. Examination: Height 5 feet 8 inches, weight 200 pounds, decidedly stout, dark complexion, coarse hair, shaggy eyebrows, heavy moustache, thick leathery skin, pudgy face, heavy lips, constantly in profuse perspiration, legs swollen and blue, skin cold and clammy to touch; examination of chest reveals small aneurysm

of ascending arch of aorta, temperature 97.8°, pulse 60, blood pressure 121 mm., knee jerk absent, areas of anæsthesia in mammary region and on inner side of thighs and legs below knees, also some perineal anæsthesia, neurasthenic, complains of insomnia, is of a positive stubborn disposition, very intractable, difficult to manage. Under organotherapy pains reduced, neurasthenia much improved, sweating lessened, insomnia disappeared. Discontinued treatment at end of ten days. I would classify this patient as thyroid insufficiency secondary to hyperthyroidism.

Many of the most troublesome symptoms of tabes can be clearly accounted for by involvement of the autonomicosympathetic system, and bearing in mind the governing influence of the glands of internal secretion over this system, the gratifying results obtained in this disease by organotherapy are easily understood.

The cardinal points in organotherapy are: first, select the glands from uncastrated animals; second, administer by intramuscular injection; third, use in combination as they occur in nature. The adrenal can be omitted in ordinary therapeutic measures, as it is represented by the pituitary. The dosage is to be worked out in each case.

There is no constant relation between the length of time tabes has existed and the amount of destruction found in the cord or severity of symptoms; neither is the severity of symptoms an always accurate index of the extent of the lesion in the cord. I have seen fulminating cases in which the patient became bed-ridden within a year after development of first subjective symptoms and other cases in which, after more than twenty years from onset of symptoms, the progress had been so inconsiderable as to but slightly inconvenience the patient. I have sections of cords showing but slight destruction of the posterior columns in which the ataxia, root symptoms, and bladder and rectal involvement were very marked early in the disease, and later improved spontaneously. The improvement in these cases may be due to sound cells taking on new functions. That an actual regeneration of cord tissue can take place is a matter of dispute, although it is certainly frequent in other nerve tissue.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE ELECTION OF DIRECT REPRESENTATIVES ON THE G.M. COUNCIL.

To the Editor of THE MEDICAL PRESS AND CIRCULAR

SIR,—In the *B.M.J.* for May 20th, 1916, fol. 740, there is a letter of mine on the above. I have no personal grievance, but I do protest against the policy adopted by the B.M.A. in 1906, 1911, and now about to be carried out again in 1916, by which all direct Representatives will necessarily be elected by means of the Association. The Association has its divisions covering Great Britain and Ireland, so that it is absolutely futile for anyone not nominated by the Association to have any substantial hope of success. Moreover, the enormous cost for a candidate debars men from making a real fight. In England and Wales we have over 25,000 doctors; the area extends from Land's End to Berwick-on-Tweed. To send a stamped letter to each elector would cost over £100. To canvass and to address the electorate is almost an impossible task. The policy of the Association rings the death knell of real direct representation on the G.M.C., which every fair-minded person regrets. We have been agitating for more direct representatives, and this is only our due when we consider that the Universities have 23 on the G.M. Council, besides five appointed by the Privy Council. If the B.M.A. carries out its present policy all the representation is in its hands. The Association, numerically, is only entitled to one-half of the direct Representatives. We know that many of its members do not approve of some of its opinions and acts, especially in regard to the Insurance Act, etc. The cost to a candidate nominated by the Association need not cost 100 coppers, whilst one nominated outside the Association will cost over £100 for stamps for sending a letter to each elector. The four nominated by the Council would do what is honourable if they would ballot for two representatives and allow two to have a chance to be real direct Representatives of the profession. It has been my privilege to work for several years as Representative of Bury and Rochdale Divisions of the B.M.A. with Drs. Macdonald and Verrall, and I am confident that if it should be their good fortune to be unsuccessful, they would have a good sporting chance of being returned by the *real direct* electorate. To use the Association in the way it has been is a blotch on the escutcheon. The use of legal power in a manner subversive to any form of moral basis is not handsome nor honourable The four representatives for England ought to be divided into four electoral areas, so that the candidates' expenses could be lessened and the views of each candidate brought before the electors. We need to have more life brought into the profession. In my opinion, if the G.M.C. had had on its Council more representatives who knew what general practice really meant, the Insurance Act in its present "derogatory form would not have been passed." The Association has stamped the Act as derogatory; what have the direct Representatives done to alter it? In my opinion, the G.M.C. ought to have acted promptly and saved the profession from the humiliating conditions involved in working the Act. I have no hesitation in stating that very many panel doctors would far rather have the old club system at 5s. per head per year than the present, which entails an enormous cost in time, in clerical work, etc., that make it often impossible to give proper care to the patients. Also the limitation as to use of certain drugs is not saisfactory for doctor nor patient. Recently four doctors, at the request of some chemists, complained that over-prescribing had been done; also that one doctor's doses were such that they were of little value. Is it not humiliating to have such criticism? All the doctors were able to explain satisfactorily the points complained of in their prescribing. Two felt that they were humiliated almost to the level of criminals.

I am, Sir, yours truly,
JNO. BROWN, M.D.

Blackpool.
May 24th, 1916.

PATENT MEDICINES AND THE BUDGET.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I do not want to write about the broader questions suggested by your correspondent "M.D." in your issue of May 24th, and the questions whether the State is called upon to protect the public, especially the simple and ignorant, against fraudulent quackery, and what are the prospects of far-reaching medical law reform are being constantly dealt with in your pages by much more able pens than mine. I write merely to protest against the terrible imputation which "M.D." lightly throws upon practitioners practising among the poorer class. It is, after all, now, under the panel system,

only a small minority who dispense their own drugs, and this minority is diminishing. These men are compelled often to give "advice and medicine" for a small fee. They do their duty honestly and attempt to make a correct diagnosis, and then give medicine called for in the case. The purveyor of fraudulent nostrums, on the other hand, by means of plausible, lying advertisements, makes the ignorant public believe that by a pill which usually contains only a small dose of purgative he can actually cure a score or more of different diseases, and can cure all external maladies by an ointment which is really made up entirely of coloured paraffin. The honest practitioner makes a diagnosis, or gets a second opinion to help him when he comes across a case of deadly disease which may be controlled or cured by medical or surgical science, and puts his patient in the way, often *via* the hospital, towards health and life; whilst, on the other hand, the fraudulent quack medicine seller induces vast numbers of simple people to rely upon his worthless trash until their diseases have progressed beyond the reach of medical and surgical help. The law is quite competent to stop much less harmful frauds than these, and until the attempt has failed I shall not believe in its failure to do the same in the case of quackery.

I am, Sir, yours truly,

G. P.

To the Editor of The Medical Press and Circular.

Sir,—The writer of the letter in your last issue over the signature of "M.D." appears to be outraged at dispensing doctors selling (as he puts it) medicine which costs a few pence for 1s. 6d. or 2s. 6d. Stated in the same way, prescribing doctors sell a sheet of paper with instructions to a chemist at probably a higher charge, although the paper costs less than the dispensing doctor's medicine. Each gives advice.

I entered the profession with a prejudice against dispensing. Now that my professional career is nearly ended, I am very fully convinced that it is extreme folly—in fact, business insanity—to give prescriptions to be used indefinitely and handed about from one to another.

I am, Sir, yours truly,

Chelsea. An Old M.D.
May 28th, 1916.

LEPROSY AND "KING'S EVIL."

To the Editor of The Medical Press and Circular.

Sir,—In reference to your comment on my evidence in the leprosy case last week, may I say that I am quite aware of the fact that leprosy and the so-called "King's evil" are not the same disease.

What I wished to convey was that in former times—as well as in the present day, as the question put to me by the judge would indicate—leprosy was frequently confounded in the popular mind with other maladies. Even now, in the West Indies, "scrofula" is one of the common names for true leprosy.

I am, Sir, yours truly,

Harley Street, Phin. S. Abraham.
May 26th, 1916.

"SINAPIS" AND THE B.M.A.

To the Editor of The Medical Press and Circular.

Sir,—I have often wondered who "Sinapis" can be, as he will not allow the ordinary contributor to hide his head under a bushel, and yet appears weekly under the patronage of Saint Sinapis. He must be a god! At any rate, I have found much comfort, consolation and amusement from his fearless outspoken remarks. What are his views? I fancy that he is a Homœopath and believes that "like cures like": that the B.M.A. has at some time ordered Sinapis to cure his malady and that he argues on this wise, Sinipis did me good and it may do the B.M.A. good. If my surmise be correct, it proves that he has a kindly heart. So far we have arrived at the conclusion that Sinapis is a kind god. As I turn over the pages of the Medical Press and Circular the B.M.A. looms large, and the ire of the god is manifest. But, dear Sir, as you know, nothing in this world is wholly bad: will you not say but one kind word?

I have read all your notes most carefully, but one thing they lack—a constructive policy. You acknowledge that the Association possesses the machinery for assisting the profession and that no other organisation exists which possesses such machinery. It is all important that we should be united at the present time, so come over and help us to obtain this desideratum. You have given us a good dose of Sinapism; now we want a little oil poured over the troubled waters. So let us look at the matter from another standpoint. Recount the good deeds of the Association, and tell us how the Association can multiply these. I can fancy you saying with Sterne:—

"Go, poor devil, and get thee gone! Why should I hurt thee? This world is surely wide enough to hold both thee and me."

I shall not criticise but suggest; because I remember "Of all the cants which are canted in this canting world, though the cants of hypocrites may be the worst, the cant of criticism is the most tormenting."

Yours,

Monkhams, Bedford, S. J. Ross.
May 27th, 1916.

MEDICAL LAW REFORM.

To the Editor of The Medical Press and Circular.

Sir,—Letters from old friends and new acquaintances which this correspondence is drawing to me illustrate especially what I have so often insisted upon in your pages during the past thirty years, and what I have referred to at least on numerous occasions during the same period in the *British Medical Journal*—the fact, namely, that the vast majority of members of the profession whose careers began any time after the year 1858 are almost completely ignorant of the main and minor facts of medical legislation. I believe that the proportion of your readers acquainted with this subect is greater than that of any other medical paper. You have at any rate kept the subject to the front in season and out of season during all the years. In view of the latent power which the British Medical Association might have brought out and wielded, the Association has done comparatively nothing in the promotion of Medical Law Reform; and the perfectly blameless ignorance of men who have used the *Journal* as their sole medical newspaper has been owing to the circumstances that Medical Law Reform has been greatly neglected by that paper. I shall return to this topic later and perhaps discuss earlier episodes. I would now only point out that the Report of the Select Committee on Patent Medicines has been virtually ignored by the *Journal*. The only notice it has received since its appearance was in the form of a few casual sentences in a leader of third-rate importance on another subject and under another heading. The report, with the evidence attached, I repeat, constitutes the most important document ever issued in promotion of Medical Law Reform, and it called for full exposition so that among the members there might be formed an enlightened opinion which might be focussed and brought to

bear when the occasion should arise. Not five per cent. of the members have any adequate information on the subject, and it seems to me evident that the Council is no better informed. If the Association had worked as it might towards Reform, I at any rate cannot doubt that it could have achieved this any time within the last twenty-five years. The case for Reform is overwhelming and needed only setting out with unquestionable authority to compel the Government to take notice of it. The Association drew up one or more Bills years ago, and seems to have imagined that Government would adopt one of these without any proof if its necessity. In a letter which I addressed to the *Journal* many years ago, I stated that such a procedure was certain to prove futile. I was then agitating for a Royal Commission to enquire into the whole question whilst urging that an enquiry of such a kind preliminary to a demand for legislation was imperative. I did not then know what I have since been taught, that a Select Committee would much more easily answer the purpose, and it is now evident from some utterances of the Select Committee on Patent Medicines, which I have quoted in earlier letters, that if the Association had pressed for a full enquiry into the whole subject the matter of practice by unqualified persons and fraudulent quacks would have been included in the enquiry. I do not know enough about the inner working of the British Medical Association to speak of the causes of its failure in medical politics. I do not know whether any blame attaches to any person or any party. But I am certain no blame attaches to the present Editor of the *Journal*. He is no autocrat. He gains his inspiration from the Council, and this is conveyed to him viâ a Committee by which he is directly controlled. The *Journal* evidently pipes a tune or holds its peace to order. I am no longer a member of the Association, but I recognise that if it fell to pieces it would be a misfortune to the profession and the public. It is the only organised body through which the profession might be able to make its voice heard. I have said before, and I repeat, that the Association has for many years been hardly anything more than a Co-operative Society for the publication of a *Journal* supplied to the members at a low price. It has in late years grown to a size two or three times bigger than is useful to the great body of members—the general practitioners. Its bulk has been swollen by introduction of great masses of literary matter not generally called for. Members who seek literary and historical reading of the kind prefer, as a rule, to choose for themselves the works they desire. One quarter of the *Journal* might be with advantage cut out and the remainder reduced by one-half. Production of the *Journal* has absorbed the greater part of the resources of the Association; it has cost, I believe, about £30,000 a year. With the doubling of the subscription plus the contribution to the Division to which the member may belong, the *Journal* is no longer cheap, and members are not likely to be long content if this is to be the sole return for their outlay.

This letter has been drawn by the question, "How about the British Medical Association?" which has been put to me and which I believe is being widely asked. In my next, with your permission, I propose to describe the attempt that was made in 1858 to provide the profession with what may be called a complete Legal Constitution, and to explain its failure.

I am, Sir, yours truly,

HENRY SEWILL.

The Old Rosery, Earlswood Common.

May 24th, 1916.

P.S.—To those of your readers who have gone through this and my previous letters it cannot be necessary for me to turn aside to examine the statements of "M.D." which appear in your issue of May 24th. "M.D.'s" letter is merely a clumsy attempt to throw dust into the eyes of uninformed people by cool suggestion of the false and suppression of the truth. When Parliament resumes its normal functions after the war nothing can prevent the bringing of the whole question of Medical Law Reformation into the sphere of practical politics. It needs no prophet to foretell that Parliament will then take in hand all such measures of social reform as shall redress the grievances and safeguard the interests of the poor, the ignorant, and the simple classes that have most claim upon the guardianship of the State. It is impossible to believe that the State will continue to tolerate the existence of the army of criminals who, for lack of simple laws, remain parasitic upon society. Among these criminals the followers of quackery in every department form the section most cunning and cynical and cruel. The report of the Select Committee is in itself more than enough to demonstrate the need for legislation, and besides the leading members of that Committee there are enough members in the House to see to it that the subject is not allowed to be put aside. It was only the war that prevented the report from being discussed immediately after its appearance.

May 27th.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

SECTION FOR THE STUDY OF DISEASE IN CHILDREN.

MEETING HELD FRIDAY, MAY 26TH, 1916.

The Ex-President, DR. E. CAUTLEY, in the Chair.

DEMONSTRATION OF CASES AND SPECIMENS.

DR. CAUTLEY showed two cases of optic neuritis (? cerebral tumour). The first case, a boy, aged 6 years 8 months, attended as an out-patient at the Belgrave Hospital for Children on April 17th, under Dr. Prentice, who admitted him the following week with these notes:—

"April 10.—Headache for two weeks. Wakes up screaming at night. Anorexia, furred tongue, offensive breath, (?) vomiting, B.O.

"April 17th.—Not so well; headache, retching, drowsiness. Arm reflex greater on the left than right side; normal abdominal reflexes; knee-jerks equal and brisk. Gait unaffected. Optic discs swollen, and hæmorrhage on the left disc. He vomited during the afternoon, but did not complain of headache."

Since being in hospital he has not suffered from headache or vomiting. Mr. Bishop Harman's report on eyes (May 9th): "Bilateral papillitis, 1.5D. elevation. Fine interstitial hæmorrhages at left disc, no exudation. No disorder of fixation." There was no albuminuria. The gait was a little stiff.

The second case was a girl, æt. 11, admitted to Belgrave Hospital on April 27. One month before she had two fits. Since then she had had almost constant headache and vomiting, the result of the headaches. On April 26th she had another fit. She was a strong, high-coloured, healthy-looking girl. Her abdominal reflexes were practically absent; deep reflexes depressed, the left rather more marked than right; plantar reflexes absent. Her head was tilted somewhat towards the right shoulder, which was a little raised. Gait somewhat unsteady,

(?) cerebellar, and she tended to fall backwards and to the left. Her left side was a little weaker than the right and showed slight inco-ordination, probably sensory; and for the same reason the left movements were clumsy. The eyes showed nystagmoid movements, lateral and rotatory, and slight left convergent squint. Perhaps there was a little weakness of the left facial nerve; and there was double optic neuritis.

Mr. Bishop Harman's report (May 9th): "Nystagmus on extreme duction, tendency to left convergent squint; well-marked papillitis in each eye, about 2D. elevation, a trifle more on the right side; no hæmorrhages or exudation, slight silkiness of right macular region."

Since being in hospital no special symptoms had been noted and she had not suffered from headache or vomiting.

Dr. Cautley also showed a case of infantilism in a boy, aged 6 years 8 months, sixth child. He was said to have been a puny babe, but to have grown up to three months of age. At the age of 9 months he only weighed 4½ lbs., and from 13 to 18 months of age he remained stationary at 6 lbs. 1 oz. He was entirely breast-fed for one and a half years, and partially so for another six months. Proprietary foods were given up to the age of 4½ years, and since then he had had ordinary diet. His mother suckled her previous baby for eighteen months, up to her confinement with this child. During the first year of life he was remarkably somnolent; and at the age of three years he had diphtheria. At times he was troubled with constipation, and occasionally with cramps in the hands and feet. He had had no such troubles during the two months he had been under observation.

Condition on May 18th: Height, 26½ in.; weight, 16 lb. 14 oz.; head, 17 in. He was pot-bellied, markedly rachitic, and the liver had dropped well below the costal margin. There were enlarged tonsils, adenoids, and moderate adenitis. The skin was elastic and complexion rather dull. He spoke fairly clearly, and mentally appeared about four to five years of age. He had twenty good teeth, the first having been cut at the age of two years. His appetite was poor.

On April 22nd he developed pertussis. This induced convulsions, once on April 24th and four times on April 25th, and was followed by general bronchitis. On admission on March 25th he weighed 15 lb. 12 oz., and on April 20th he had gained 28 oz. Since then the pertussis and bronchitis had caused loss of weight. The Wassermann reaction was negative.

There appeared no special cause for his backward development, beyond malnutrition and unsuitable feeding during early life. He had been taking polyglandin and improved, but the improvement may have been due to food and nursing.

Dr. W. Mitchell Smith showed a case of giantism in a girl, aged 12 years 9 months.

Family history: Patient was the seventh of ten pregnancies; two miscarriages; five died at or soon after birth; three living and well: brother, aged 20 years, height 5 ft. 9½ in., weight 16 st.; a brother, aged 11 years, normal; and present case. Father suffers from diabetes; once 17 st., now 14 st. Mother healthy. Maternal grandmother reputed to be 32 st. at time of her death.

Present condition: Height, 5 ft. 4⅓ in.; weight, 17 st. 7 lb. Very obese, with equal distribution of fat; large framework, especially across the hips. Pubic hirsuties. Menstruating regularly since last Christmas. Blood-pressure, 125 mm. Hg.; urine normal; optic discs normal. Mentality normal for a girl of her age (Standard VII.); excellent memory, placid disposition, gross eater.

Skiagram of sella turcica showed that (1) it was very well developed for a girl of her age; (2) there was no erosion of anterior or posterior part to indicate a tumour of any size.

Dr. J. Walter Carr showed a case of juvenile general paralysis in a boy, æt. 8. There was nothing in the family history to suggest syphilis, and the patient did not present any of the stigmata of the disease. He had not had any previous illness of importance. For about six months his walk had been getting increasingly jerky, and he had sometimes fallen down. For the last three months his pupils had been noticed to be unequal. Recently his speech had been getting indistinct and mumbling. Formerly he was rather bright at school, but of late had ceased to make any progress; had been unable to write, and had lost his memory. He had not had any convulsions. He was a healthy-looking, rather excessively stout boy. He showed marked mental impairment, with distinct delusions of exaltation—for instance, he talks of having knocked down a policeman and killed two Germans. He had incontinence of urine and often of fæces also. The left pupil was larger than the right and reacted very sluggishly to light; the right pupil reacted normally. the left optic disc was very considerably paler than the right. He had a distinctly spastic gait, with double ankle clonus and exaggerated knee-jerks. The triceps and supinator jerks were also increased. It was not possible to be sure whether the plantar reflexes are flexor or extensor. There was no ataxy. Wassermann reaction of blood positive.

Mr. A. S. Blundell Bankart showed a case of hemi-hypertrophy—partly crossed, in a boy, æt. 6. Asymmetry of face and limbs was noticed soon after birth. The condition had remained stationary, except in so far as the child had grown. The right side of the face, right half of the tongue, right thigh, and right leg were decidedly larger than the corresponding parts on the left side. The left forearm was decidedly, and the left arm was slightly larger than the right forearm and arm respectively. Skiagrams of the forearms and legs showed that the bones on the enlarged side are slightly thicker than those of the smaller side (?). There was no increase in length. The left testicle was slightly larger than the right.

Dr. C. O. Hawthorne showed a case of double optic neuritis in a boy, æt. 9, without other evidence of intracranial or nervous disease, or of disease in the thoracic or abdominal viscera. Some degree of anæmia, but by no means extreme, and Wassermann reaction negative. Had been under observation in hospital for fourteen days, and except for some headache on first day had seemed quite well and happy. Acuity of vision, 6/5 each eye. The history was of occasional attacks of headache commencing eight months ago, sometimes very severe, and in recent weeks often accompanied by vomiting. No admitted violence to the skull or of illness other than the above. There was a history of "consumption" in the mother's family and of "fits" in that of the father; a sister had a "tubercular knee."

Mr. E. D. D. Davis showed a case of ulceration of the soft palate in a girl æt. 13 years, who had been sent to Charing Cross Hospital by Dr. J. D. Rolleston with the history that she had been admitted to the Fever Hospital for diphtheria on April 14. One week before admission to the Fever Hospital she complained of sore throat but was otherwise quite well. Cultures of the fauces showed no diphtheria bacilli and direct smears showed no Vincent's organisms.

When seen by Mr. Davis on May 19th there was a large irregular ulcer involving the left half of the uvula, soft palate, and left pillar of the fauces, with considerable loss of the left half of the palate.

The ulceration was atypical of lupus, tubercle, or syphilis, but there was no other lesion of the nose, pharynx, larynx, or ear. Wassermann's reaction was positive.

Mr. E. D. D. DAVIS also showed a case of lupus of the hard palate and gums for comparison with the above.

Dr. CAUTLEY (for Dr. P. Hamill) showed a case of recurrent jaundice. The patient, a girl, æt. 13, had been under observation since November, 1914, suffering from recurrent attacks of jaundice. From then up to the present time she had not been entirely free from pigmentation. During the exacerbations bile was present in the urine, the fæces were clay-coloured, and the liver was enlarged. In the intervals her general health was good. Since January, 1916, the spleen had begun to enlarge, and had extended more than 1 in. below the costal margin. During an exacerbation the blood count was found to be: Red blood cells, 3.78 million; white blood cells, 10,800 per cubic millimetre; hæmoglobin, 70 per cent.; colour index, 0.9 per cent. Differential count: Polymorphonuclears, 52 per cent., total number 5,620; lymphocytes, 45 per cent., total number 4,860; eosinophiles, 1 per cent. total number 100; basophiles, 2 per cent., total number 220. Very slight anisocytosis and poikilocytosis, no nucleated red cells seen. Corpuscular fragility normal. Loewi's pancreatic reaction was negative.

Dr. CAUTLEY (for Dr. P. Hamill) also showed a case of unilateral enlargement of the tongue. The patient, a girl, æt. 5, was brought to hospital with unilateral enlargement of the tongue. It was with difficulty that the tongue could be retained in the mouth. The enlargement appeared to affect the right side only, and involved the floor of the mouth. The papillæ were enlarged but did not resemble the minute vesicles commonly seen in cases of lymphangiectasis. Skiagrams did not reveal any corresponding hemihypertrophy of the cranial bones.

Mr. PAUL BERNARD ROTH showed a case of congenital defect of the left ulna in a girl, æt. 9, which was described in the *Lancet*, May 23rd, 1914.

Dr. J. LAWSON DICK read a paper on The Teeth in Rickets.

And Dr. ERIC PRITCHARD read a paper on The Rational Treatment of Rickets, with illustrative case.

SPECIAL REPORTS.

GENERAL MEDICAL COUNCIL.

ONE HUNDRED AND THIRD SESSION.

FIRST DAY, TUESDAY, MAY 23RD, 1916.

Sir DONALD MACALISTER, President, in the Chair.

The ACTING REGISTRAR having called the roll, the PRESIDENT intimated that he had received a letter from Sir Isambard Owen stating that he would be unable to be present during the session on account of war business. The President understood that Dr. David Hepburn would also be unable to be present owing to his military duties.

Mr. Littlejohn was then introduced by Mr. HODSDON.

The official intimation of Mr. Littlejohn's appointment as representative of the University of Edinburgh had been read on November 2nd, 1915.

The official notification of the appointment of Dr. Johnson Symington as representative of the Queen's University of Belfast for three years from April 12th, 1916, was read.

Dr. Symington was introduced by Dr. LITTLE.

Also that of Professor Andrew Francis Dixon, M.B., Sc.D., as representative of the University of Dublin for five years from May 13th, 1916.

Professor Dixon was introduced by Dr. LITTLE.

The PRESIDENT delivered the following address:—

GENTLEMEN,—The Council meets to-day in its new Chamber, and enters into complete occupation of the building erected for its accommodation under the supervision of the Site Committee. To that body, to the architect, Mr. Frere, to the builders, Messrs. Chinchen and their craftsmen, to the office staff, and to all who have helped forward the work of construction, equipment, and arrangement, under conditions of exceptional difficulty, I would, in the Council's name, express our grateful acknowledgments. Members and the public will find, I hope, that the new offices enable us to transact business in circumstances of greater quiet and comfort than were possible in Oxford Street. Considerations of economy have made us postpone for the present some desirable improvements in matters of furnishing and the like. The essentials have been provided, however, and the rest can be added as times improve. Meanwhile, it is satisfactory to know that the expenditure on the building and its contents has been met from the proceeds of the sale of the Oxford Street premises and from surplus funds in the hands of the Council and its branches. The building will thus be free from debt, and at the same time the income hitherto derived from the Council's property, on the old site, will be unimpaired. The new offices will, I am persuaded, prove in the end to be thriftier, as well as handier, than the old.

Our late President, Sir William Turner, who took a warm interest in the transfer, has not lived to see it completed. His death in February last deprived us of a wise and experienced counsellor, and his University of a great administrator, honoured alike for his scientific eminence and for his sterling character. In remembrance of his long association with the Council, I have ventured to place his bust in this Chamber. It is the original model for the marble bequeathed to the Anatomical Museum at Edinburgh. Through the courtesy of the sculptor, Mr. Herbert Hampton, I have been enabled to acquire it; and I now offer it for your acceptance as a memorial of my distinguished predecessor.

We have also to lament the loss of our friend and colleague, Sir Charles Bent Ball, who died in the midst of his many activities two months ago. His strong good sense, his professional knowledge and skill, and his genial warmth of manner, gained for him an influential position here as elsewhere. We shall miss him greatly, both in the Council and in the Committees, whose work he guided with real devotion.

Sir William Whitla retires on the completion of his term of office as the representative of the Queen's University of Belfast. His great erudition and practical knowledge in the department of pharmacology and therapeutics were freely placed at the service of the Pharmacopœia Committee. His colleagues and the editors were constantly indebted to him for willing and able help in the preparation of the new *Pharmacopœia*.

In his place the Queen's University has appointed Professor Symington. As successor to Sir Charles Ball, the University of Dublin sends us Professor Dixon. The addition of these distinguished anatomists to those who are already valued members of the Council will ensure that the importance of anatomy as a branch of medical education will not be overlooked. Dr. Harvey Littlejohn, whose appointment in place of Sir Thomas Fraser I intimated in November, takes his seat now. To him, and to the other new members, I desire to offer not only an official but a personal welcome. I am privileged to call them friends as well as colleagues.

At the end of last year, our General Registrar, who is still on military service, was promoted to the rank of lieutenant-colonel.

The necessary demands of the Services for qualified medical officers continue to put a severe strain on the resources of the profession. The Central and Local Committees, which have now been established in the three Kingdoms, and recognised for recruiting purposes

by the military authorities, are actively engaged in endeavouring to meet these demands, and at the same time to leave a fair provision for the medical needs of the civil population. The task is not easy. It calls for much careful consideration of individual persons, places, and circumstances. This could hardly be given under any general scheme of conscription, or by any but professional committees in touch with practitioners throughout the country. The value of the work already done by these committees is acknowledged by the War Office and the Admiralty. The greater the support and confidence extended to them by the profession, the better they will be able to carry through their important operations for the good of all.

It had been expected that in 1915, the first complete year since the war began, the number of practitioners added to the *Register,* and available for military or civil work, would show a perceptible decrease. The expectation would probably have been realised but for the decision to recall from the combatant ranks medical students of the senior years, and but for the establishment of reciprocity with the Dominions and with Belgium. In the result it came out that the number of registrations in 1915 was 1,526, or 354 in excess of the average (1,172) for the preceding five years. Of the whole number 181 appear in the *Colonial List* and 88 in the *Foreign List.*

The question of maintaining, in this and in future years, a supply of newly-qualified practitioners, sufficient for the needs of the country continues to engage the attention of the military authorities and of the Council. The calling-up of junior medical students, under the successive systems of recruiting, has undoubtedly given rise to some anxiety. Enquiries were accordingly made, at the instance of Lord Derby, as Director-General of Recruiting, in order to ascertain the facts of the situation. From returns obtained by the Council last January, it appeared that the number of students who during 1915 began medical study in the various professional schools and teaching institutions was 1,935. The number of first-year women students was 456. The number of second-year students was 1,020. The average annual entry of first-year students registered during the preceding five years was 1,441. In 1915 there were thus nearly 500 first-year medical students in excess of the average annual number registered in the preceding five years.

At the beginning of the present year the number of first-year students in actual attendance on instruction at medical schools (apart from teaching institutions) was ascertained to be 1,626.

The expected depletion of students, as compared with normal years, had thus been more than compensated by new entries, and if things remained as they were, the position four years hence would not be unsatisfactory. It was thought advisable, however, to recommend that exemption from military service, already conceded to fourth-year and fifth-year students, should be extended to third-year students, who showed their proficiency in the earlier subjects of the curriculum by passing a third-year professional examination in March or April, at the end of the winter session. An Order to this effect was accordingly issued from the War Office. Lord Derby then asked the Executive Committee to appoint a small committee, including two representatives nominated respectively by the President of the Board of Education and the Secretary for Scotland, for the purpose of watching the general situation as regards Great Britain, and reporting upon it to him as Director-General of Recruiting. In view of the fact that under the attestation and the compulsory systems, many of the medical students of 1915 would by April have been called from their studies, Lord Derby further requested that returns should be obtained of the numbers, belonging to each of the five years, who were in actual attendance on professional courses of instruction at the beginning of the present summer session. The replies to my inquiries on this head, for which I have to thank the authorities of the schools of medicine and teaching institutions, were returnable on May 18. They are not yet complete, and they have not been fully analysed. But the Council will be interested to learn that so far as they go they give the following results:—

Students still pursuing their professional studies in May, 1916:—

First year	1,800
Second year	950
Third year and fourth year	1,750
Final year	950

The expected depletion is most marked in the third-year and fourth-year group. Owing to the Order I have mentioned many third-year students are reckoned with fourth-year students for recruiting purposes, and the group cannot readily be divided. Your committee propose to call Lord Derby's attention to this group, as its present depleted condition indicates that a shortage of newly qualified practitioners may be expected by the end of the year 1918.

The representations made to the Government on your behalf, respecting the Scottish Midwives Bill, were effective. The Bill, which was properly regarded as an emergency measure, became law on December 23, 1915. The Scottish Board has since been duly constituted, and the first set of rules for the enrolment of midwives has, after submission to the Executive Committee, been approved by his Majesty in Council.

Revised rules, framed by the Central Midwives Board under the English Act with a view to the better training and supervision of certified midwives, will be submitted to the English Branch Council during the present session. They indicate that the policy of the Central Board is progressive, and that its aim is to increase the efficiency of midwives. In the present emergency the responsibilities of these women must necessarily become greater, and it is the more imperative that the State and the profession should take steps to ensure their entire fitness. That some practitioners have not yet realised their duty with respect to the operations of women, who are *not* certified as fit to attend mothers in childbirth, is strongly suggested by cases brought before you at the last and at the present session. The Council will doubtless be prepared to consider whether the time has not come to issue a special warning notice on this subject.

In Scotland an important legal precedent has been established by a decision, on appeal, of the Court of Session. A limited company carries on in Edinburgh an objectionable form of unqualified practice under the style of the "Dr. Temple Company." The Royal College of Physicians, with Dr. Norman Walker its Treasurer, has succeeded in obtaining a perpetual interdict against the company, restraining it from using the word "Dr." and so pretending to the public that it possessed some medical title to practise. The Royal College has thus vindicated its claim to intervene for the protection of the people of Edinburgh against a gross form of imposition. Company law and administration in England have hitherto failed to check similar abuses. The civic spirit of the Royal College merits our cordial recognition, and its success may well encourage other corporations to re-examine their powers in respect of the medical interests of the public.

In another Scottish court, a pretender to medical qualifications, who attempted to obtain money by falsely assuming a medical title, has been sentenced to three months' imprisonment, apparently without the option of the fine for mere false assumption provided in Section 40 of the Medical Act, 1858. This also may prove to be a useful precedent in extension of the meagre safeguards of the statute.

Several of the penal cases you will have to consider this week relate to practitioners who have been tried and convicted elsewhere. It is for the Council to decide whether these practitioners should be allowed to remain on the *Medical Register.*

The exigencies of the war have induced certain of the Canadian provinces to reconsider their position with regard to Imperial reciprocity. In November I reported that Ontario and Saskatchewan had ranged themselves with the Eastern provinces. Now I report that legislation for the establishment of reciprocal relations has been effected in Manitoba and is proceeding in British Columbia. The Province of Alberta alone remains outside the movement. It has expressed a desire for reciprocity, but so far we have not learned that it has taken the necessary action. When it does,

the Dominion of Canada will, province by province, have fulfilled the conditions laid down in the Medical Act, 1886. There will then be no obstacle to the application of that Act by His Majesty to Canada as a whole, and to our recognition, for purposes of registration here, of the Diploma in Medicine, Surgery and midwifery, granted after examination by the Canada Medical Council. The whole problem of Canadian qualifications would thus at once receive a satisfactory simplification.

The Empire of Japan, whose University degrees in medicine have long been registrable, has now decreed that in October, 1916, the new law on medical practice, intimated to the Council ten years ago, will come into effective operation. The Japanese authorities will then be able to guarantee that the degree of Bachelor of Medicine, granted by specified medical colleges under Government direction or supervision, will represent a qualification not inferior to the corresponding University degree. The Executive Committee will consider the question of adding this college degree, granted under the new conditions, to the list of qualifications registrable in the *Foreign List*.

Reports may be expected from the respective committees on the teaching of medical ethics, the revision of the dental curriculum, and other topics of interest.

A reference to the minutes of the Executive Committee will show how numerous and important are the matters with which it has had to deal since last session. Medical and dental legislation throughout the Empire has given rise to questions of policy and practice on which the advice of the Committee has been sought by the Privy Council, the Foreign Office, the India Office, and the Colonial Office. In pursuance of the powers delegated to the Committee, such advice has been given, and gratefully accepted by the Departments of the State.

Moved by Dr. LITTLE, seconded by Dr. NORMAN MOORE, and carried by acclamation: "That the President be thanked for his address, and requested to let it be printed in the minutes."

Moved by the CHAIRMAN of the Business Committee, seconded by Sir HENRY MORRIS, and agreed to: "That the Council do adjourn at 4 p.m. to-day to enable certain committees to meet for the completion of their reports."

Moved by the CHAIRMAN of the Business Committee, seconded by Sir HENRY MORRIS, and agreed to "That the yearly tables dealing with examinations be received and entered in the minutes, and be referred to the Examination Committee for its consideration."

The Council proceeded to the election of the Executive Committee, Dr. Dixon and Dr. Symington acting as scrutineers.

It was agreed that the following be the members of the various committees:—

Business Committee.—Dr. Norman Moore (Chairman), the President, Sir Henry Morris, Dr. Norman Walker, Dr. Little.

Pharmacopœia Committee:—The President (Chairman), Dr. Norman Moore, Sir George Philipson, Dr. Caton, Dr. Barrs, Dr. Cash, Dr. Norman Walker, Sir John Moore, Dr. Little.

Finance Committee.—Mr. Tomes (Chairman), the President, Sir Henry Morris, Mr. Hodsdon, Dr. Little,

Dental Committee.—The President (Chairman), Sir Henry Morris, Mr. Tomes, Mr. Hodsdon, Sir Arthur Chance.

Dental Education and Examination Committee.—Mr. Tomes (Chairman), The President, Sir Henry Morris, Mr. Hodsdon, Dr. Knox, Sir Arthur Chance, Dr. Symington.

Students Registration Committee.—Dr. Norman Moore (Chairman), The President, Dr. Langley Browne, Dr. Mackay, Dr. Norman Walker, Sir Bertram Windle, Dr. Kidd.

The Council proceeded to the election of the Penal Cases Committee, Sir Arthur Chance and Dr. Littlejohn acting as scrutineers.

On motion from the CHAIR, seconded by the CHAIRMAN of the Business Committee, it was agreed: "That the following report from the Executive Committee made pursuant to Standing Order VII., 19, be received and entered in the Minutes:—

REPORT.

On November 2nd, 1915, the Executive Committee reported that Part II. of the Medical Act (1886) having been applied by an Order of His Majesty in Council dated June 10th, 1915, to the Province of Saskatchewan (see Minutes, 1915, pp. 150-151), the Committee had considered the conditions under which Medical Qualifications granted in the Province should be recognised for registration in the *Colonial List* of the *Medical Register* of the United Kingdom, and that in the event of information being received that the arrangements for reciprocity with the Province of Saskatchewan had been satisfactorily completed, and that a course of professional study extending over five years had been instituted in the Province, the President had been empowered on behalf of the Executive Committee to direct the Registrar to register any person who holds the Licence of the College of Physicians and Surgeons of Saskatchewan, granted after examination in Medicine, Surgery and Midwifery, together with the Licence to practise in the Province, in the *Colonial List* of the *Medical Register*, provided he satisfies the Registrar of the General Medical Council regarding the other particulars set forth in Part II. of the Medical Act, 1886.

The desired information as to the adoption of the five-years course in 1915 having been received, the President, in virtue of the powers conferred upon him, directed the Acting Registrar, on April 5th, 1916, to register any person who produced the Licence of the College of Physicians and Surgeons of Saskatchewan, and who satisfied the prescribed conditions.

Dr. MAGENNIS asked the President the following question, of which he had given notice:—"By what Statutory Authority does the Council pay the Deputy appointed 'to attend and be present on behalf of the General Medical Council at the professional examinations held by the Apothecaries' Hall, Ireland, for the purpose set forth in Section 18 of the Medical Act, 1858, and to report to the Council the general character of such examinations.'"

The PRESIDENT answered that the Council had acted under the authority conferred upon it by Section 13 of the Medical Act, 1858, which provided that: "All monies payable to the respective Councils shall be paid to the Treasurers of such Councils respectively, and shall be applied to defray the expenses of carrying this Act into execution," and Section 18 of the same Act which provided that "The several colleges and bodies in the United Kingdom mentioned in Schedule (A.) to this Act shall from time to time, when required by the General Council, furnish such Council with such information as they may require as to the courses of study and examinations to be gone through in order to obtain the respective qualifications mentioned in Schedule (A.) to this Act, and the ages at which such courses of study and examination are required to be gone through, and such qualifications are conferred, and generally as to the requisites for obtaining such qualifications; and any member or members of the General Council, or any person or persons deputed for this purpose by such Council, or by any branch Council, may attend and be present at any such examinations."

The President announced that the following had been elected members of the Penal Cases Committee:—The President, *ex officio*, Dr. Saundby, Mr. Tomes, Dr. Norman Walker, Dr. Little, and that the following had been elected members of the Executive Committee: The President, *ex officio*, Dr. Norman Moore, Sir Henry Morris, Mr. Tomes, Dr. Langley Browne, Mr. Hodsdon, Dr. Norman Walker, Sir John Moore, Sir Arthur Chance.

Strangers then, by direction from the Chair, withdrew in order that the Council might consider certain matters of business *in camerâ*.

The Council subsequently adjourned.

SECOND DAY, WEDNESDAY, MAY 24TH, 1916.

The President, Sir Donald MacAlister, in the Chair.

The minutes of the last meeting were taken as read, and confirmed.

The Council proceeded to the consideration adjourned from November 4th, 1915, of the case of Herbert Midgley Reeve, registered as of 1 Bournemouth Park Road, Southend-on-Sea, M.R.C.S.Eng. 1899, L.R.C.P.Lond. 1899, M.B.U.Lond. 1899, who had been summoned to appear before the Council on the following charge:—

"That being a registered medical practitioner you knowingly enabled one Mary Ann Preece, whose name had been removed by the Central Midwives Board from the roll of midwives, to practise as a midwife in contravention of the provisions of the Midwives Act, 1902, as if the said Mary Ann Preece were duly certified under the said Act.

"And that in relation thereto you have been guilty of infamous conduct in a professional respect."

The complainants were the Central Midwives Board.

At the conclusion of the proceedings the President announced the decision of the Council. . . The Council takes a very grave view of the action of a medical practitioner who "covers" the practice of unqualified or uncertified women, under whatever pretext they practise midwifery or otherwise attend and treat women in labour. But in order to give you an opportunity of reconsidering your position in relation to this matter, the Council has postponed judgment in your case till the next Session, in May, of which you will receive due notice. You will then be required to attend, and to produce testimony from your professional brethren as to your character and conduct in the interval.

Mr. Reeve attended in answer to his summons, accompanied by Mr. W. V. Reeve, his solicitor.

The Central Midwives Board, the complainants, were represented by Mr. Julius Bertram, their solicitor.

Sir Francis Champneys, President of the Central Midwives Board, withdrew, and the President announced that he would take no part in the proceedings.

The President having referred to the finding of the Council at the previous hearing, Mr. W. V. Reeve read testimonials referring to Mr. Herbert Midgley Reeve's conduct in the interval, from Mr. James B. Maxwell, Mr. John F. Walker, M.B., Dr. C. Grant Pugh, Medical Officer of Health of the Borough of Southend-on-Sea, and Councillor H. William Cooper, of the Borough Insurance Committee.

Mr. Bertram, on behalf of the complainants, expressed his gratification at the nature of the testimonials produced, and did not desire to address the Council on behalf of the complainants.

Mr. W. V. Reeve then briefly addressed the Council on behalf of his client.

At a suggestion from the Chair, Mr. H. Midgley Reeve expressed his regret for his past conduct, and gave the Council an undertaking as to his conduct in the future.

Strangers having been re-admitted after the Council had deliberated *in camerâ*, the President announced its judgment as follows:—

Mr. Reeve: I have already informed you on behalf of the Council of the grave view it takes of the nature of the offence, specified in the charge, which had been proved against you; but having regard to your assurances as to your conduct in the future, the Council has not seen fit to direct the Registrar to erase your name from the *Medical Register*.

The Council proceeded to the consideration of the case of Frederick Robinson, registered as of 96 Clough Road, Masbro, Rotherham, L.R.C.P.Edin. 1880, who had been summoned to appear before the Council on the following charge:—

"That being a registered medical practitioner you by your assistance knowingly enabled a Mrs. F., a woman not certified under the Midwives Act, 1902, to attend women in childbirth under cover or pretence that such women were attended or to be attended by you or by her under your direction, thereby enabling the said Mrs. F. in contravention of the said Act to practise as if she were certified thereunder.

"And that in relation thereto you have been guilty of infamous conduct in a professional respect."

The complainants were the Central Midwives Board.

Mr. Frederick Robinson was not present in answer to his notice, nor was he represented by counsel or solicitor.

The solicitor read a telegram which he had received that day from Mr. Robinson declining to attend.

The Central Midwives Board, the complainants, were represented by Mr. Julius Bertram, their solicitor.

Sir Francis Champneys, President of the Central Midwives Board, again withdrew, and the President announced that he would take no part in the proceedings.

The Council's Solicitor having read the notice, Mr. Bertram addressed the Council on behalf of the complainants, and then called Mr. George William Duncan, the Secretary of the Central Midwives Board, as a witness, and examined him as to the accuracy of his declaration. No member of the Council desired to put any question to Mr. Duncan. He answered a question put to him by the Legal Assessor. Mr. Bertram put in six certificates of conviction of Mrs. F. referred to in Mr. Duncan's declaration; he next called Mr. Charles Lee des Forges, the Town Clerk of the Borough of Rotherham, and examined him as to the working of the Midwives Act in Rotherham, and as to his knowledge of Mrs. F. No member of the Council desired to put any question to Mr. des Forges.

Mr. Bertram then called Mrs. Caroline Eyre as a witness, and examined her as to the truth of her declaration. She answered questions put to her from the Chair, and by the Legal Assessor. Mr. Bertram called in succession Mrs. Annie Johnson, Mrs. Rose Hamilton, Mrs. Mabel Rosine Searson, Mrs. Florence Pearce, Mrs. Emily Smithurst, and examined them as to the truth of their declarations. They all answered questions put to them from the Chair.

Mr. Bertram also called Mrs. Grace Reed and Mrs. Amy Worth, who had not made declarations, and examined them as witnesses. Mrs. Worth also answered a question put from the Chair.

He called also Mrs. Mary Jane MacGrevy, certified midwife, and examined her as a witness, and then Miss Mary Stewart, Inspector of Midwives and Health Visitor, as a witness, and examined her as to the notifications of birth in the confinements of certain of the previous witnesses. She answered questions put from the Chair and by members of the Council through the Chair.

In the absence of Mr. Frederick Robinson, the Legal Assessor placed before the Council the letters which Mr. Robinson had written in answer to the complaint and the charge, dated March 25th, 1916, May 13th, 1916, and May 22nd, 1916.

He also read a letter dated May 18th, 1916, requesting that the case might be postponed, and a telegram dated May 22nd, 1916, withdrawing the request. The telegram read by the Solicitor at the commencement of the proceedings was also put in. This closed the case. Mr. Bertram did not address the Council in reply.

The Council deliberated on the case *in camerâ*.

Strangers having been re-admitted, the President announced the judgment of the Council as follows:—

I have to announce that the Council have judged Frederick Robinson to have been guilty of infamous conduct in a professional respect, and have directed the Acting Registrar to erase from the *Medical Register* the name of Frederick Robinson.

The Council proceeded to the consideration of the case of Kenneth Ram Gujral Shaw, registered as care of Thomas Cook and Son, Ludgate Circus, E.C., M.B., Ch.B. 1912, U.Edin., who had been summoned

to appear before the Council on the following charge :—

"That being a registered medical practitioner you were convicted of the following misdemeanours, viz. :—

"(1) On September 17th, 1915, at the Thames Police Court, of being drunk and disorderly, in respect of which offence you were bound over in the sum of 6os. to be of good behaviour for six months.

"(2) On September 21st, 1915, at the County of London Sessions, of exposing your person, in respect of which offence you were on October 12th, 1915, bound over in the sum of £5 to appear for judgment if called upon within twelve months."

Mr. Shaw was called, but did not answer to his notice, nor was he represented by counsel or solicitor.

The ACTING REGISTRAR having read the notice, the Council's Solicitor laid the facts of the case before the Council.

He read a letter from the Commissioners of Police of the Metropolis, establishing the identity of the convicted person who was described as Kenneth Shaw, with the registered practitioner named Kenneth Ram Gujral Shaw. He proved the service of the notice of inquiry by registered letter to Mr. Shaw's registered address, and read a letter, supplementary to the notice, which he had written to Mr. Shaw as to further evidence which he proposed to place before the Council.

The Council's Solicitor put in the two certified copies of the convictions. He read reports from the office of the chief Commissioner of Police to the Acting Registrar, notifying the convictions.

He called Mr. Carol Naish O'Sullivan, a registered medical practitioner, for whom Mr. Shaw had acted as *locum tenens* at the time of his first conviction, as a witness, and examined him as to Mr. Shaw's conduct while in his service.

Mr. O'Sullivan answered questions from the Chair, and by members of the Council through the Chair.

The Council's Solicitor called Miss Gertrude Fleming, governess in Mr. O'Sullivan's service, and examined her as a witness. No member of the Council desired to put any questions to Miss Fleming.

This closed the case.

After the Council had deliberated *in camerâ* and strangers had been re-admitted, the PRESIDENT announced the judgment of the Council as follows :—

I have to announce that, Mr. Kenneth Ram Gujral Shaw having been proved to have been convicted of the misdemeanours alleged against him in the notice of inquiry, the Acting Registrar has been directed to erase his name from the *Medical Register*.

The Council proceeded to the consideration of the case of Daniel Evans Powell, registered as of 101 High Street, Tooting, S.W., M.B., C.M. 1894, U.Glasg., who had been summoned to appear before the Council on the following charge :—

"That being a registered medical practitioner you by your assistance knowingly enabled one J. W., a woman not certified under the Midwives Act, 1902, to attend women in childbirth under cover or pretence that such women were attended or to be attended by you or by her under your direction, thereby enabling the said J. W. in contravention of the said Act to practise as if she were certified thereunder.

"And that in relation thereto you have been guilty of infamous conduct in a professional respect."

The complainants were the Central Midwives Board.

Mr. Powell attended in answer to his notice, accompanied by Mr. J. A. C. Keeves, his counsel (acting for Mr. Curtis Bennett, who had been called away), instructed by Messrs. W. Butcher and Sons, solicitors.

The Central Midwives Board, the complainants, were represented by Mr. Julius Bertram, their solicitor.

Sir Francis Champneys, President of the Central Midwives Board, withdrew, and the PRESIDENT announced that he would take no part in the proceedings.

The Council's Solicitor having read the notice, Mr. BERTRAM, before opening his case, sought leave to take the evidence of two witnesses whose attendance the next day would be difficult to obtain. Mr. Keeves did not object, and leave was accorded.

Mr. Bertram accordingly called Miss G. E. ——, who had not made a declaration, and examined her as to her experience at Mrs. W.'s home. She was cross-examined by Mr. KEEVES, and re-examined by Mr. BERTRAM. No members of the Council desired to ask any questions.

Mr. BERTRAM called Mrs. E. M. C—— as a witness, and examined her as to the truth of her declaration. She was cross-examined by Mr. KEEVES, and re-examined by Mr. BERTRAM. She answered questions put to her by the Legal Assessor and from the Chair.

The Council then adjourned.

(*To be concluded next week.*)

NEW BOOKS AND NEW EDITIONS.

The following have been received for review since the publication of our last monthly list :—

BAILLIERE, TINDALL AND COX (London).

Diseases of Infants and Children. By Prof. Henry D. Chapin, A.M., M.D., and Godfrey R. Pisek, D.Sc., M.D. Third Revised Edition, with 191 woodcuts and coloured plates. Pp. 596. Price 15s.

The After-Treatment of Operations: A Manual for Practitioners and House Surgeons. By P. Lockhart Mummery, M.B.Cantab., F.R.C.S. Pp. 285. Illustrated. Fourth Edition. Price 5s.

Operative Midwifery: A Guide to the Difficulties and Complications of Midwifery Practice. By J. M. Munro Kerr, M.D., C.M. Third Edition, with 308 illustrations. Pp. 790. Price 25s.

Orthopædic Surgery. By Edward H. Bradford, M.D., and Robt. W. Lovett, M.D. Fifth Edition, with 369 illustrations. Pp. 426. Price 15s.

Rhizopod Protozoa, the cause of cancer and other diseases. Being Part IV. of "Protozoa and Disease," by J. Jackson Clarke, M.B.Lond., F.R.C.S. Pp. 202, with sixty-eight illustrations. Price 7s. 6d.

BURNES AND OATES, LTD. (London).

Who Goes There? By the Author of "Aunt Sarah and the War." Pp. 94. Price 1s.

CAMBRIDGE UNIVERSITY PRESS.

Cerebro-Spinal Fever. By Michael Foster, M.A., M.D., R.A.M.C., and N. F. Gaskell, M.A., M.D., R.A.M.C. Pp. 222. Price 12s. 6d.

CHURCHILL, J. AND A. (London).

The Cure of Obesity and Obese Heart. By J. S. Kellett Smith, F.R.C.S. Pp. 93. Price 3s. 6d.

FANNIN AND CO. (Dublin).

History of the Royal College of Surgeons in Ireland and of the Irish Schools of Medicine, including a Medical Bibliography and a Medical Biography. By Sir Charles A. Cameron, C.B. Second Edition, revised and enlarged. Pp. xv. and 882. 1916.

FROWDE, HENRY, AND HODDER AND STOUGHTON (London).

Nerve Injuries and their Treatment. By Purves Stewart, M.A., M.D.Lond., and Arthur Evans, M.S., M.D.Lond. Pp. 208. Price 8s. 6d.

HARRISON AND SONS (London).

Links in a Chain of Research on Syphilis (Oxidation and Reduction). Being the Hunterian Lectures delivered before the Royal College of Surgeons, March, 1916. By J. E. R. McDonagh, F.R.C.S. Pp. 206. Price 5s.

HEFFER AND SONS, W., LTD. (Cambridge).

Tuberculosis and the Working Man: An Appeal to Friendly Societies. By P. C. Carrier-Jones, M.A.Cantab., M.R.C.S., L.R.C.P.Lond., with a Preface by G. Sims Woodhead, M.A., M.D., LL.D. Pp. 47. Price 6d.

LEWIS, H. K., LTD. (London).

Mentally Deficient Children: Their Treatment and Training. By G. E. Shuttleworth, B.A., M.D., and W.A. Potts, M.A., M.D. Fourth Edition. Pp. 298. Price 7s. 6d.

Localisation by X-Rays and Stereoscopy. By Sir James Davidson, M.B., C.M.Aberd. Pp. 82. Illustrated. Price 7s. 6d.

Notes on Galvanism and Faradism. By E. M. Magill, M.B., B.S.Lond. Pp. 236. Price 4s. 6d.

The Pathology of Tumours. By E. H. Kettle, M.D., B.S. Lond. With 126 illustrations. Pp. 232. Price 10s. 6d.

LONGMANS, GREEN AND CO. (London).

The Respiratory Exchange of Animals and Man. By August Krogh, Ph.Dd. Pp. 173, Price 6s.

METHUEN AND CO., LTD (London).

The Drink Problem of To-day. Edited by T. N. Kelynack, M.D. Pp. 318. Price 7s. 6d.

PALMER, CECIL, AND HAYWARD (London).

That Life is the Origin and Purpose of the Universe. By S. G. Palmer Hallett, M.A. Pp. 75. Price 3s. 6d.

SHAW AND SONS (London).

Clinical Disorders of the Heart-Beat. By Thomas Lewis, M.D., etc., etc. Pp. 116.

SMITH, ELDER AND CO. (London).

More Minor Horrors. By A. E. Shipley, Sc.D. Pp. 163. Price 1s. 6d.

WRIGHT, JOHN AND SONS, LTD. (Bristol).

Our Baby. For Mothers and Nurses. By Mrs. J. Langton Hewer. Illustrated. Pp. 208. Price 1s. 6d.

SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

Specially compiled for The Medical Press and Circular.

Treatment of Tetanus.—Bruce (*R.A.M.C. Jnl.*, November, 1915) gives an analysis of the cases of tetanus that were treated in home military hospitals from August, 1914, to August, 1915. During the period notes were available on the cases of two hundred and thirty-one patients with the disease, and of these one hundred and thirty-three died. In a report that was published in July, 1915, of one hundred and seventy-nine patients treated for tetanus overseas, it is stated that one hundred and forty had died, giving a case mortality of 78.2 per cent. Bruce says that the conclusions to be arrived at by this analysis are as follows:—(1) In the 231 cases of tetanus under review the mortality was 57.7 per cent. (2) Cases with a short incubation period were more fatal than those of longer incubation. (3) Most cases occurred on the tenth day after the wound. (4) There are few allusions to the use of antitetanic serum as a prophylactic. (5) In regard to the therapeutic effect of antitetanic serum, the evidence would go to show that this action was not well marked. (6) If antitetanic serum is used—and in such a fatal disease it would seem wrong not to give the patient the benefit, even if doubtful, of the antitoxin—it ought to be injected in the first place intrathecally, as this method would seem to possess advantages over the intravenous and subcutaneous methods. (7) There is no evidence that any benefit accrued to the patients treated by carbolic acid or magnesium sulphate injections. (8) To sum up, the treatment of a patient with tetanus might be as follows:—(a) Place in a quiet, darkened room, under care of a sympathetic and capable nurse. (b) The best surgical treatment of the wound should be thoroughly carried out to ensure the prompt and complete removal of all septic products. (c) The intrathecal injection of at least 3,000 units of antitetanic serum. At the same time 10,000 to 20,000 units may be injected intravenously and subcutaneously. This procedure to be repeated as frequently as the course of the disease seems to demand. (d) In addition to this the patient should receive sedative drugs, such as chloral or chloretone, in full doses.

K.

Blood Pressure.—Phipps (*Boston Med. and Surg. Jnl.*, September 23, 1915) records the results of a series of observations undertaken with the view of determining the blood pressure in different parts of the body of the same individual. From these investigations he draws the following conclusions:—(1) A difference of 5 or 10 mm. in the blood pressure reading may be observed, dependent on whether the pressure be determined by palpation or auscultation, but neither method can be said to be the more accurate. (2) The blood pressure reading may vary in the same individual between the right and the left arms, thighs, or calves, or between arm, thigh, and calf; this variation is in no way uniform. (3) The variations are apparently as great in young individuals as in old, and in patients showing healthy arterial walls, as where there is arterio-sclerosis. (4) The location of the artery, especially in its relation to other structures, such as bone and muscle, probably is of much greater importance in determining the blood-pressure reading than is the thickness of the overlying tissues. (5) Difference between the right and left brachial pressures is by no means diagnostic of aortic aneurysm. (6) The presence of a higher pressure in the leg than in the arm is not diagnostic of aortic insufficiency, although this has been stated by previous observers. (7) Blood pressure in the vessels of the leg and the arm is not "practically the same."

K.

Migraine.—Saint Remy (*New York Med. Jnl.*, March 25, 1916), as the result of personal experience, and observation on others, attributes the phenomena presented by this condition to intermittent nasal obstruction. He says:—"Pressure upon the sphenopalatine ganglion, caused by swelling of the middle turbinate impinging against a relatively high deviation of the nasal septum, by disturbance of the local circulation, ends in a reflex spasm of the cerebral vessels, which accounts for all the remote symptoms, to wit, the vertigo, nausea, vomiting dullness, oppression, etc., which appear in turn. Once this ætiology is grasped it becomes clear why the disease comes on about the age of puberty, for it is then the nasal septum begins to bend from pressure upon it by the faulty development of the facial bones. The disproportionate growth of the frontal and maxillary causes the vomer to yield. Thus also is made clear the reason for the spontaneous cessation of the disease late in life, when the nasal mucosa is no longer erectile."

K.

Radical Operation for Carcinoma Uteri.—Taylor (*Surg., Gyn., and Obs.*, xxii., 4) says of the two routes, abdominal and vaginal, that the former is the first choice, but if there is a combination of a thick abdominal wall with a roomy vagina, and some prolapse of the uterus, the vaginal route will be the better. The difference between simple and radical hysterectomies is the amount of pelvic connective tissue removed with the uterus. The extent of the operation performed for the removal of any malignant growth is limited by the risk to the life and the amount of mutilation of the patient. The mutilation can be ignored, except that the greater the amount of tissue removed the greater the risk. For growths of the same extent in patients the primary mortality is only moderately greater in the radical operation, and the advantages outweigh this. Injuries to the bladder are considered the result of the disease rather than of the difficulties of the operation. The extensive separation of the bladder is probably the cause of the frequent cystitis afterwards. Hæmorrhage is a serious difficulty, and is responsible for a number of deaths; ligation of the anterior branch of the internal iliac will help to control this. The risk of infection is probably no greater than in the simple hysterectomy. For the favourable case, in good condition, and moderate abdominal wall, and no associated pelvic lesion, the radical operation is advised; for a limited growth in a poor subject a simple abdominal hysterectomy, or occasionally a vaginal one. For inoperable cases radium, the X-ray, or cautery treatment is recommended.

F

Roentgen Treatment of Uterine Carcinoma.—Case (*Surg. Gyn., and Obs.*, xxii., 4) says that, considering the great number of cases which have undergone Roentgen treatment, the percentage of clinical cures is very small. Anatomical examination has shown the possibility of complete removal of operable and inoperable uterine cancer, but what percentage of permanent cures cannot as yet be stated. The condition of the cases is greatly improved in general health by relief of pain and discharge, and the fatal results are postponed and mitigated. The advantage of cautery treatment in combination is considered unquestioned in inoperable cases, but in operable cases the alternative of Roentgen therapy should never be offered, and all cases after operation should be treated by the rays.

F.

Radium in Carcinoma of the Cervix Uteri.—Miller (*Surg. Gyn., and Obs.*, xxii., 4) says that surgery is the only treatment so far known that offers a permanent cure for cancer in the early stages of the disease. If the percentage of ultimate cures is increased it will be by continuing earlier operation with other therapeutic agents, the most promising being X-rays or radium. Border-line cases are not advised for the

radical operation, as the risks are not justified by the results, and radium or X-rays gave as great or greater amelioration of symptoms. No proof of increase in operability by preliminary radium treatment is available, but improvement appears to have occurred, and to justify the hope that operation would be successful. The consequent increase in connective tissue would probably increase the difficulties of operation. It is thought that cauterisation prior to radium treatment is not the best procedure, as it requires longer to check the local symptoms and the subsequent histories do not show that the cases remained well any longer. The effect of radium can only be proved by the length of time after treatment, and that has not yet been obtained. It eradicates the surface disease, but that it is capable of reaching the outlying areas is not established. Radium has no field absolutely to itself, but should be used in common with other methods. F.

Metastatic Carcinoma of the Ovaries.—Stone (*Surg., Gyn., and Obs.*, xxii., 4) says that malignant tumours of the ovaries, even when of such size as to control the clinical course of the disease, are frequently secondary growths, especially from the stomach and the breast, and this should always be recognised in the treatment and prognosis. The route of metastasis is rarely a chance distribution of emboli, but occurs by direct extension through the retro-peritoneal lymph-nodes or peritoneal implantation, this latter being especially liable to occur during the period of the ovarian functional activity. The histology of ovarian tumours varies with the nature and location of the primary growths; the adenocarcinomatous type appears to be frequent, but a larger number are of the diffuse infiltrating type, in which the glandular structure is lost, but a fibro-carcinomatous structure is seen. F.

Mercury in the Treatment of Pyorrhœa.—Barton L. Wright (*Medical Record*, May 6th, 1916) regards pyorrhœa alveolaris as one of the most frequent and widespread of infections, and one of the most dangerous to the infected. He places much stress on efficient local treatment. He administers a deep muscular injection of one grain of mercuric succinimide every seventh day until the discharge of pus has disappeared and the gums have regained their normal condition. In female patients the dose should be one-fifth to two-fifths of a grain less than in males. The drug was dissolved in hot sterile water. The longest period required to effect a cure was forty-one days, the shortest four days; the average was seventeen days. The treatment was given in seventy-five cases, in forty-one of which there were signs of systemic infection. In every case the systemic as well as the local evidences of the disease disappeared.

OBITUARY.

DR. JAMES THORNTON MACPHERSON, CHORLTON-ON-MEDLOCK, MANCHESTER.

THE death is announced of Dr. James T. Macpherson, of Manchester. He graduated M.B.C.M. at the University of Aberdeen in 1887 and M.D. in 1905, and for the last 25 years practised in Manchester, where he was highly esteemed.

DR. J. E. S. PASSMORE, M.R.C.S., L.R.C.P., GAINSBOROUGH.

THE death took place at Gainsborough, of Dr. John Edmund Sandars Passmore, one of the best-known public men in the county of Nottingham. Dr. Passmore, who was a native of North Molton, North Devon, had been resident in Gainsborough 24 years, and was 57 years of age. He was educated privately and at the London Hospital, and became M.R.C.S., L.R.C.P.Lond. in 1892. He was created justice of the peace for the Parts of Lindsey in 1907, and for a number of years he represented the North Ward of Gainsborough on the County Council. He was one of the most active members of the Lincolnshire Nursing Association, and was one of the original members of the Gainsborough Urban Council. During the absence of his partner, Dr. Smith, on military service, he had acted as deputy medical officer of health for the Gainsborough rural district. Dr. Passmore leaves a widow and one son.

DR. S. CATHCART, M.R.C.P., L.R.C.S., HIGHGATE.

WE regret to record the death of Dr. Samuel Cathcart, a well-known medical practitioner in Highgate, who passed away on May 14th at the age of 64. About three months ago the deceased contracted influenza while visiting a patient late at night, and pneumonia supervened. He was educated at Edinburgh University, and qualified L.R.C.P. and S. in 1876. He came to London soon afterwards, and until 1897 practised in Tottenham, whence he removed to Highgate. Dr. Cathcart was keenly interested in cycling and motoring, and journeyed from London to Northumberland, his birthplace, on one of the first machines to be fitted with pneumatic tyres. It is believed that he was the second doctor in Highgate to use a motor car in his practice. He leaves a widow, three sons, and two daughters.

DR. ALFRED GRACE, M.R.C.S., L.S.A., CHIPPING SODBURY.

THE death is anounced of Dr. Alfred Grace, the last survivor of the five brothers, of whom Dr. W. G., Dr. E. M., and Fred attained such exceptional distinction in the cricket field. Alfred was born at Downend, near Bristol, in 1840. Educated at Bristol, he qualified M.R.C.S. in 1863 and L.S.A. in 1864. For many years practised at Chipping Sodbury, Gloucestershire. Like his more famous brothers, Dr. Alfred Grace was well known as a cricketer, but at no time did he rank with his brothers. In local cricket he scored several innings of over a hundred, and when only 15 years old he formed one of 22 of West Gloucestershire who met the All England Eleven at Bristol. He was recognised as one of the finest horsemen in England, and for many years followed the Duke of Beaufort's hounds three or four days a week. He was formerly Surgeon Lieutenant-Colonel of the Royal Gloucester Hussars Yeomanry Cavalry.

MEDICAL NEWS IN BRIEF.

Seats in Lifts.

THE Home Secretary calls the attention of occupiers and managers of business premises who have taken on or may be taking on women and girls to act as lift attendants to the need which exists in certain circumstances for allowing the attendants facilities for resting in the intervals of work.

There is a growing tendency, with a view to increasing the passenger accommodation, to make lifts without seats. He urges the provision of an attendant's seat when other sitting accommodation is not available, and in specially heavy cases, where work is practically continuous, recommends that one or two short intervals should be allowed for purposes of rest. A convenient form of seat, which is now being provided in some new lifts, consists of a wooden flap which closes flat against the side of the lift when not in use.

Devon and Cornwall Sanatorium.

THE thirteenth annual meeting of the Devon and Cornwall Sanatorium for Consumptives at Didworthy and King Edward VII. Memorial Dispensary for Tuberculosis, Plymouth, was held at Plymouth.

The annual report stated that there were 70 beds at the Sanatorium, 40 for men and 30 for women. The daily average of patients was 60. The accommodation was therefore sufficient to meet normal demands for admission. During the year 272 patients (20 more than the prevous year) had been under treatment. The average period of treatment for each patient was 103

days. Of cases admitted, 114 were in the first, 123 in the second, and 35 in the third stages of the disease. The increase in the cases admitted in the first and second stages of the disease was a very encouraging sign. Treatment at the earliest possible moment could not be too strongly insisted upon. The committee had given the first call on beds to tubercular soldiers and sailors. In spite of war prices, the average total cost per in-patient had only increased 1s. 8d. per week. The balance-sheet showed the total income £5,011, and a debit of £41 7s. 1d.

Women and Medicine at Cambridge.

At a Congregation of the University of Cambridge on June 2nd, a Grace will be offered to the Senate throwing open the first and second M.B. examinations and the examination in architectural studies to women. The usual procedure of publishing a report and recommendations and discussing them before taking a vote has not been followed, and a vigorous protest was issued on May 27th in a fly-sheet signed by the Master of Jesus, the Master of Pembroke, and ten others, who announce their intention to vote *non-placet* to the Grace for the following reasons:—

No report has been presented by either Board: there has been no discussion of the recommendations. The Senate is asked to vote without information and without debate. The question whether women should be admitted to the medical examinations of the University raises difficult and complex problems which require careful consideration. Further, it involves serious issues of a controversial nature. We feel strongly that it is undesirable that such proposals should be brought forward at the present time, when so many members of the Senate are away from Cambridge on national service. We object still more strongly to the procedure adopted. Recommendations are presented without reports justifying them. They are not submitted to discussion, but we are told that they have received the approval of the General Board of Studies and of the Local Examinations and Lectures Syndicate. We do not think that the Senate ought to be asked merely to register the proposals of Special Boards brought forward without explanation. We fail to understand why the General Board and the Local Examinations and Lectures Syndicate should be consulted when the Senate is not consulted. We do not think that the powers of the Senate to approve should be delegated to these bodies. We suggest that the ordinary procedure should be adopted: that the Special Board for Medicine and the Board of Architectural Studies should be asked to present reports, that in due course these reports should be discussed in the Senate, and that the Council should consider any proposals or amendments pertinent to the subject. If, after discussion, it is decided to proceed further, we suggest that proper time for consideration should be allowed before the Graces are offered.

Metropolitan Asylums Board.

At a meeting of the Metropolitan Asylums Board on May 27th, it was reported that the Ministry of Munitions had given instructions for the discontinuance of building work at Tooting Bec Asylum on grounds of urgent national importance. Mr. W. H. Ecroyd said that it was a question whether national importance would not be better served by keeping such buildings going on. Hardly a man who was stopped at the County Hall was given work by the Government. The Clerk explained that the men were required for building munition factories, and the matter was referred to the Works Committee.

Work for the Ambulance.

At the request of the Liverpool school-children, the Lord Mayor on May 24th handed over to the Countess of Derby (representing the Liverpool branch of the Red Cross Society) a motor-ambulance, for which the money was raised by the children collecting and selling medicine bottles. A big crowd of people witnessed the ceremony, which took place on St. George's Plateaux. At the conclusion an ambulance ran into the crowd and four persons were injured.

Swiss Doctors to Examine German Prisoners.

Reuter's Agency learns that the Commission of Swiss doctors, under the charge of Lieut.-Colonel Sturzeneffer, of the Swiss Army Medical Service, has arrived in London. The Commission is charged to examine German prisoners of war in this country who are to be sent to Switzerland for special hospital treatment. The Commission will visit all prisoners' camps, both in Germany in the case of English prisoners, and in England in the case of German prisoners, and every prisoner will have the right to present himself for examination.

Devonport Royal Albert Hospital.

By means of a house-to-house collection £820 has been collected in aid of this institution. Promises of weekly, monthly, and yearly subscriptions have also been received.

Small-pox and Soldiers.

An Army Order states that owing to the occurrence of small-pox in various parts of England and Wales soldiers' leave will be curtailed.

Soldiers will not be allowed to proceed on leave to their homes in parts of the counties of Lancashire, Northumberland, Durham, Glamorganshire, and Monmouthshire.

Incidence of Infectious Diseases.

The Local Government Board has recently issued a report on the Statistics of the Incidence of Notifiable Infectious Diseases in each sanitary district of England and Wales in 1915 (New Series, No. 109. 1916. Price 6d.). The following are the total numbers of the chief notifiable diseases notified, excluding cases among sailors and soldiers:—Pulmonary tuberculosis 73,358 other forms of tuberculosis 22,864, small-pox 90, typhus 45, scarlet fever 127,086, diphtheria 53,597, enteric fever 6,364, continued fever 63, puerperal fever 2,057, erysipelas 23,382, cerebro-spinal fever 2,566, poliomyelitis 517, ophthalmia neonatorum 6,806.

The death is announced of Mr. Basil A. Dyer, Coroner of Bath for the past 26 years.

The death occurred last Saturday of Dr. Charles E. Fitzgerald, Honorary Surgeon Dentist to the King in Ireland, and ex-President of the Royal College of Physicians of Ireland.

A Glasgow citizen who desires to remain anonymous has acquired Erskine House and 350 acres of ground and presented them to the Princess Louise Hospital for Scottish limbless sailors and soldiers.

Mr. William Philip, of Boynds Keith Hall, Aberdeen, left £1,000 to the Inverurie Town Council, the income to be applied for the maintenance of a qualified nurse for the Burgh and neighbourhood.

Capt. Frederic Geo. Alleyne Arkwright, who was killed in an aeroplane accident on October 14th last, and a descendant of the inventor of the spinning jenny, left £50 to Miss Morgan, nurse at the Cottage Hospital, Ashbourne, "when I was ill there in 1912."

Miss Charlotte Emily Beckwith, of Southport, bequeathed one-half of the residue of her estate, which amounts to about £8,000, to the Victoria University of Manchester in aid of the "John Henry Beckwith Scholarship" founded by her mother, and one-fourth each to the Manchester Infirmary and the Southport Infirmary.

Dr. Thomas Burnie, L.R.C.P., L.R.C.S., of 389 Mansfield Road, Nottingham, first President of the Nottingham Medico-Chirurgical Society, for many years Chairman of the Nottingham House and Land Company, and who died on September 23rd last, aged 77 years, left estate of the gross value of £24,011 5s. 4d., of which £4,032 18s. is net personalty.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

Letters to the Editor and Original Papers intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of *bona fides*. These should be addressed to the Editor at the Offices of this Journal; if in Ireland, to the Dublin Office, 29 Nassau Street; from all other parts of the United Kingdom these should be addressed to the London Office, 8 Henrietta Street, Strand.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s., post free at home or abroad.

Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada. For South Africa, The Record Publishing Co., Cape Town. Messrs. Geo. Robertson and Co., of Sydney and Melbourne, are our special agents for Australia.

ADVERTISEMENTS.

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole page, 13 insertions at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistances, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

FLIES AND DISEASE.

Warnings about the danger of flies as carriers of disease germs are being issued by the Lambeth Borough Council.

VALUABLE MEDICINE BOTTLES.

Medicine Bottles gathered in a house-to-house collection in Islington have been sold for about £300. The money is being devoted towards the purchase of a motor ambulance for the front.

A DIAGNOSIS.

When a doctor is irritable, it may be because he is out of patients.—*Pall Mall Gazette.*

Dr. John Knott.—Owing to pressure on our space your communication is unavoidably held over till our next.

MEDICAL APPEAL TRIBUNAL.

Mr. Philip Snowden is to ask Mr. Tennant if he will create an Appeal Medical Board, containing some civilian doctors, to whom recruits may appeal if they are not satisfied with the decision in the first medical examination.

THE KNOCK OUT!

Jimmy Wilde, the British fly-weight boxing champion, has for the second time been rejected for Army service by the Medical Board, this time on account of deficiency in weight.

DOCK RATS.

Dr. Willoughby, Medical Officer of Health for the Port of London, reports that during last year 42,491 rats were caught and destroyed in dock warehouses and vessels in the docks and rivers.

Meetings of the Societies, Lectures, &c.

Thursday, 1st June.

Royal Society of Medicine (Section of Dermatology) (1, Wimpole Street, W.).—5 p.m.: Adjourned Discussion; On Mr. J. E. R. McDonagh's paper on "The Rationale and Practice of Chemotherapy."

Friday, 2nd June.

West London Medico-Chirurgical Society (West London Hospital, Hammersmith Road, W.).—8.30 p.m.: Paper; Dr. J. Dundas Grant, "Some Points of Practical Interest in the Diagnosis and Treatment of Diseases of the Throat, Nose and Ear."

Vacancies.

County Asylum, Whittingham, Preston, Lancs.—Assistant Medical Officer. Salary £250 per annum, with furnished apartments, board, and washing. Applications to the Medical Superintendent.

The Guest Hospital, Dudley.—Assistant House Surgeon. Salary £120 per annum, with board, rooms, attendance and washing. Applications to the Secretary.

Manchester Northern Hospital for Women and Children, Park Place, Cheetham Hill Road, Manchester.—Lady House Surgeon. Salary £120 per annum, with apartments and board. Applications to Mr. Hubert Teague, Secretary, 38, Barton Arcade, Manchester.

Bury Infirmary.—Lady Junior House Surgeon. Salary £150 per annum, with board, residence, and washing. Applications to the Honorary Secretary, Infirmary, Bury, Lancs.

London Temperance Hospital, Hampstead Road, N.W.—Assistant Resident Medical Officer. Salary £120 a year, with residence, board, and laundry. Applications to the Secretary.

The Royal Infirmary, Sheffield.—House Physician. Salary £120 per annum, with board and residence. Applications to Jno. W. Barnes, Secretary.

South Devon and East Cornwall Hospital, Plymouth.—House Surgeon. Salary £250 per annum, with board, residence, and washing. Applications to P. J. Langdon, Secretary.

Royal Devon and Exeter Hospital, Exeter.—House Physician. Salary £150 per annum, with board, apartments, and washing. Applications to Samuel S. Cole, Secretary.

Appointments.

Carruthers, N. S., L.R.C.P.Lond., M.R.C.S., Certifying Surgeon under the Factory and Workshop Acts for the Acle District of the county of Norfolk.

Glover, V. J., M.D.Liv., Ch.B.Vict., Medical Office of Health for the Waterloo and Seaforth U.D.C., and Schools Medical Officer.

Hillyer, W. H., M.D.Dur., Certifying Surgeon under the Factory and Workshop Acts for the East Grinstead District of the county of Sussex.

Births.

Bride.—On May 23rd, at Beechwood, Eccles, the wife of T. Milnes Bride, Lieut., R.A.M.C., of a daughter.

Garden.—On May 21st, at 202, Bedford Hill, S.W., the wife of Temp.-Captain A. S. Garden, R.A.M.C. (of Colombo), of a son.

Good.—On May 23rd, at Dobbs, High Bickington, N. Devon, the wife of Arnold S. Good, M.R.C.S., L.R.C.P., of a son.

Hayden.—On May 25th, at 192, Wymering Mansions, W., the wife of Captain A. F. Hayden, M.B., F.R.C.S., I.M.S. (ret.), of a son.

Higgs.—On May 21st, at "Dunedin," Egmont Road, Sutton, Surrey, the wife of Major F. W. Higgs, M.D., R.A.M.C. (T.F.), of a daughter.

Hodder.—On May 26th, at 160, Sandon Road, Stafford, the wife of Lieut.-Colonel A. E. Hodder, R.A.M.C. (T.), of a daughter.

Kinloch.—On May 26th, at The White House, St. Albans, the wife of R. Blair Kinloch, M.B., M.R.C.S., of a son.

Orchard.—On May 25th, at Crewkerne, Somerset, to Eleanor H. (*née* Phillimore), the wife of Lieut. J. Russell Orchard, R.A.M.C., a son.

Marriages.

Bolt—Ringland.—On May 23, at St. Anne's Church, Lewes, Capt. Richard Frank Bolt, R.A.M.C. (T.C.), third son of J. F. Bolt, Esq., of Westbury-on-Trym, Bristol, to Effie Lyndall, younger daughter of the late W. R. Ringland, of Belfast, and Mrs. Ringland, of Lewes, Sussex.

Dryden—Gidley.—On May 22nd, at St. Mary's, Christchurch, New Zealand, Douglas Dixon Dryden, Capt. New Zealand Medical Corps, of Barnard Street, Timaru, Canterbury, New Zealand, to Mary Northleigh, daughter of the late Gustavus Gidley, Esq., of Plymouth, S. Devon.

Hey—Brown.—On May 23rd, at the Wesleyan Chapel, Darcy Lever, Bolton, Wilson H. Hey, F.R.C.S. (England), Captain, R.A.M.C., of Manchester, to Elsie Brown, M.B., Ch.B., eldest daughter of Mr. and Mrs. T. H. Brown, of Ashbourne, Bolton.

Hill—Langridge.—On May 23rd, at Newmarket, Rowland Hill, M.D., M.R.C.P.Lond., Temp. Surg., R.N., son of the late Squire Hill, J.P., Ballyclare, Co. Antrim, to Gertrude, daughter of the late Arthur Langridge, Leytonstone.

Ryland—Moore.—On May 17th, at The Hirsel Private Chapel, Coldstream, N.B., Capt. Archer Ryland, F.R.C.S.Edin., and R.A.M.C., son of Mr. and Mrs. Henry Woodcock Ryland, of 43, Holland Park, London, W., to Gladys Mary, daughter of the Rev. C. A. Moore, Domestic Chaplain to the Rt. Hon. the Earl of Home, K.T. and Mrs. C. A. Moore, of The Hirsel, Coldstream, N.B.

Deaths.

Alexander.—On May 26th, at Ashwick, Poole Road, Bournemouth West, suddenly from angina pectoris, William Alexander, M.D., in his 54th year.

Goodhart.—On May 28th, at 25, Portland Place, W., Sir James Frederic Goodhart, Bt., M.D., F.R.C.P., aged 70.

Harold.—On May 27th, at 65, Harley Street, after a long and painful illness patiently borne, Dr. John Harold.

Kimbell.—On May 28th, at a nursing home in London, Lieut. Harry John Sullings Kimbell, R.A.M.C., of Richmond Road, Hackney, until recently in charge of Preston Hall Hospital, Maidstone.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

VOL. CLII. WEDNESDAY, JUNE 7, 1916. No. 23.

AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

Circular W. 41.

THE Central Medical War Committee, under date May 27th, issued a circular explaining the position of medical men under the Military Service Acts, which is worthy of careful attention. Having regard to the fact that the signatories are still Dr. Alfred Cox and Mr. Bishop Harman, writing from 429, Strand, it is a pleasant surprise to find that the tone of the circular is free from the blemishes which have characterised some of its predecessors. It may safely be read without a previous dose of bromide. The circular sets forth that enrolment with the Central Medical War Committee enables a medical man who is of military age (*i.e.* under 41) to escape the attentions of an ordinary Recruiting Officer, an official who might otherwise place a doctor in the ranks where his special knowledge would be useless. In these days, when all and sundry are being turned into soldiers, it is an advantage to be an officer, and this privilege is secured to anyone who enrols with the Committee.

The New Style.

THE circular also points out that the Central Medical War Committee will almost certainly be recognised as the Tribunal in matters medical, and that consequently a great deal of time and trouble will be saved if medical men of military age will enrol at once, whether or not they intend to claim exemption. This is quite reasonable, and is quite tactfully stated. On the question of the age limit for medical men, announced as 45 years, the language of gentle persuasion in the present circular is strikingly different from the bullying note which was so conspicuous in some of the earlier ones. This age limit was, of course, invented by the Committee, and has no legal support of any kind. The invention was not in itself unreasonable or objectionable, and when presented in its newer form it may well appeal to many who were disgusted and repelled by its former verbal garments. The literary manners of Dr. Alfred Cox and Mr. Bishop Harman show considerable improvement. Their literary style, however, does not. The fourth paragraph of the circular begins with the inexcusably illiterate "Firstly." But that is a small matter.

The Gist.

THE gist of the Circular may be said to be contained in the following paragraphs, which I cordially commend to the consideration of all concerned.

"Every unenrolled medical man of military age who is not a conscientious objector is urged to enrol without delay in order to save both himself and the local Tribunals the trouble of dealing with an appeal which, in the circumstances explained above, will in any event be referred to the Central Medical War Committee. As you are already aware, enrolment involves an obligation to take a Commission in the R.A.M.C. as and when required by the Central Medical War Committee after consideration of all the relevant circumstances."

"If you are over 41 but have not yet reached your 45th birthday you are still eligible for general military service in a medical capacity. All the medical officers needed by the Army cannot be supplied from the men under 41 without great inconvenience and indeed hardship to some of these men and to some areas of the country. We suggest to you that a sense of professional duty and a spirit of fairness will lead you to enrol, so that the necessary selection may be made from as wide a field as possible."

With the concluding sentence I am very pleased to find that I am in entire accord.

An Appeal Board.

THE Central Medical War Committee, or the Advisory Committee of the Royal Colleges, or both, would do well if, before it is too late, they made representations in the proper quarter to secure the recognition of a board of appeal from the decisions of those who are engaged in the medical examination of recruits. As matters stand at present there is no appeal of any kind, with the natural result that men who are physically quite unfit are being kept in idleness at the expense of the state. The medical examination of recruits is necessarily a somewhat perfunctory performance. It would be impossible to examine every man with the same care that would be bestowed upon him were he a candidate for life insurance, and many are consequently accepted, or rather conscripted, who ought not to be. A fair proportion of these know themselves to be unfit

and produce medical certificates to that effect; they are nevertheless made to "fall in." I do not wish to minimise the difficulties of the situation, but a good many of them, and several very real grievances, would disappear with the constitution of a really competent Board of Appeal.

Its Necessity. The necessity for some appeal from the verdict of the recruiting medical officer has been apparent to the observant for several months past, but the advent of compulsion invests the matter with urgency. The examiner cannot be expected in every case to go into such minutiæ as the presence or absence of albuminuria or glycosuria, the estimation of blood pressure, or the state of the fundus oculi, and yet facts might easily emerge from such investigations which would put a totally different complexion upon the acceptability of a candidate who, to cursory examination, appeared to be highly suitable. At one time some medical examiners would not even look at a certificate brought by a candidate. I do not know whether this has now been altered, but it is obvious that the sole responsibility should not rest upon one man. There should be a board to which the examiner could refer doubtful cases and to which dissatisfied recruits could have reasonably easy access.

Medical Law Reform. The letter which appears in this issue from the facile pen of Mr. Henry Sewill is, in a sense, a continuation of the one which we published last week. They reopen a question upon which, as he properly says, the general practitioner is very partially informed, and he rightly insists that this ignorance is due in very large measure to the British Medical Association. It is not so very long ago—in the days before the Insurance Bill—since the Association really represented the profession. Doctors were told that it existed to further and defend their interests, and apparently believed that somehow or other it did so. Then came the Insurance Bill and the great awakening. During the period of its power and authority the Association, through its *Journal*, had a magnificent opportunity to educate not only professional, but also public opinion in matters which a little foresight would have told it would some day become vital to our independence. It did nothing; with the result that we now have to face a gathering storm unrepresented, unorganised and unprepared. I hope Mr. Sewill will continue to address us, not on the subject of the B.M.A., but on the questions of medical law reform upon which he is so high an authority.

The Moment. It is certain that with the war and its aftermath really at an end, men's mental attitude towards many things will be found to have undergone a very profound change. The efficiency and self-sacrifice of the medical contribution to the colossal struggle is on everyone's lips, and the public is consequently as well disposed towards us as it is ever likely to be. If ever there was a time at which we could press for medical law reform with some prospect of success, that time will be in the immediate future. If Mr. Sewill will continue his instructive letters he will do much to educate professional opinion upon these important matters. And professional opinion is badly in need of education. We are hopelessly blind to our interests and inconceivably tolerant of encroachments.

A Letter from Mr. Miles. The letter from Mr. Eustace Miles, for my acknowledgment of which the printer found such an original place in last week's issue, is dated May 22nd. It is in further reference to the following words which appeared in the "Periphery" on April 26th: "We can look with indulgence upon the degenerates who listen with trituratic fervour to Mr. Eustace Miles' pseudo-scientific siftings from the scullery." In connection with this passage I received a long letter (it filled six pages of typewritten MS.), to which I briefly referred in our issue of May 17th. Mr. Miles' present letter begins as follows: "Your note with regard to my letter in reply to the words used about me in your previous letter (he means article) will not do at all." This was startling, and I read on in some trepidation. My nervousness was soon justified by the following truly alarming passage: "I am afraid, if you are going to pass the matter off so lightly, I shall have no alternative but to urge some hundreds of those who have consulted me, to sue you for libel, on the strength of your having called them 'degenerates.'" I invite Mr. Eustace Miles at once to set about his canvass for candidates to sue me; I shall be much interested to know how it progresses.

Three Propositions. Mr. Miles concludes his letter with three propositions categorically stated. "First, that I am doing work which doctors do not do." I am not concerned to deny this; neither am I prepared to assert that it is discreditable to doctors that they should decline to place themselves in competition with Mr. Eustace Miles. "Secondly, that I have succeeded in helping thousands of people, where doctors have failed." This is indeed a grandiose claim: but Mr. Miles has no monopoly in it. All unqualified practitioners, from Sequah to Mrs. Eddy, have said much the same thing in much the same terms. "Thirdly, that qualified medical men have put themselves in my hands for dieting." To which, I again reply that I find no difficulty whatever in believing it. The circle of professional orthodoxy is wide enough to include not only all sorts of cranks and faddists, but also earnest seekers after physiological salvation who are prepared to give a trial to anything, however commercial and uninviting. It does not therefore surprise me to know that some of these have been tempted to sample the delights which I am assured await them at Mr. Eustace Miles' Restaurant. But I am in a state of nervous prostration about that libel action.

Sinapis.

Surgeon William Millar, Army Medical Department, of Brighton, left £9,466.

THE TREATMENT OF WAR PSYCHOSES.

There are frequently accounts in the public press of the cure of the various psychoses produced by the war and its effects, either by accident, as in the torpedoing of the *Lusitania*, or by design, as in suggestion.

Now, it is known that large numbers of men are being returned useless from the front every week suffering from what is collectively termed "shell-shock," and the question naturally arises as to what system of treatment is being adopted, and how far it conforms to the necessity of the case. As far as we can ascertain, there are two methods being used. One is the provision of a wholly inadequate number of hospitals, where all cases are collected together without any attempt at classification. The patients seem to be in charge of a number of doctors whose qualifications for dealing with this class of injury seem to be as miscellaneous as the various types of cases. In fact, as can be gathered from the papers on these conditions which are so frequently communicated to the medical press, the doctors in charge seem to be much more concerned in describing the conditions than in curing them. In January last, a discussion lasting for two evenings took place on "Shell Shock" at the Royal Society of Medicine, at combined meetings of the Sections of Neurology and Psychiatry. The last speaker on the second evening, Dr. Leonard Guthrie, drew attention to the fact that practically nothing had so far been said about treatment. The general trend of such treatment as was mentioned seemed to be to leave the patients alone and hope for their recovery, for this did fairly often take place.

The other method now employed is the same in principle, but the patients are boarded out for rest cures (?) in cottages in the country instead of being collected into hospitals.

Now, compared with this, the system adopted by other combatant nations is far more thorough and efficient. Each nation has a number of suggestion hospitals, where cases are sent as soon as possible, and where they receive treatment by suggestion from the earliest possible moment. Perhaps this is one of the reasons why the Germans boast of returning so much larger a number of the injured to the ranks compared with ourselves. In fact, the proper treatment of these cases *is* by suggestion, but by suggestion given properly and thoroughly by those who know how to do it.

Here, then, we come to the crux of the whole matter. In all foreign countries, treatment by suggestion was a common practice before the war, and the public were conversant with it, a large number of doctors practised it, and all doctors understood what could be accomplished by it. In this country, on the other hand, few practised it, fewer still of these knew much beyond the theory, and the general medical public was, and still is, as ignorant of its principles and practice as the general mass of the population.

Owing to these facts, it is no exaggeration to say that many thousands of men are suffering indefinitely, possibly for the rest of their lives, from the various forms of traumatic psychoses, who could be very rapidly cured and rendered efficient soldiers if only the right treatment were adopted. One cannot help noting in the published articles that towards the end the writer nearly always gives his opinion that these cases are not suitable for suggestion treatment. Why they are not suitable, does not appear. The inference is irresistible that the writer is totally unacquainted with the method. One is reminded in this connection of the time when Lister was demonstrating at King's College Hospital his antiseptic treatment. It was then the vogue for surgeons, brought up in the old school and too hide-bound to learn or even grasp the new surgery, to protest *urbi et orbi* their disbelief in Lister's teaching. It is the natural defence of the old order against the new. But this is no time for allowing soldiers to remain sick and a great expense to the country, when they are wanted in the active army.

It may be argued that there are very few doctors who understand suggestion, and that there are thousands of patients constantly arriving home who require this treatment; how, then, is it possible to supply the want?

The answer would be, first to point out what is being done in other matters medical, where, as in surgical cases, there are not enough doctors to do all the dressings; these are deputed largely to unqualified persons, such as nurses, probationers, and V.A.D. nurses acting under more or less surgical supervision. Just as the efficiency of the V.A.D. hospitals depends entirely on the efficiency of the commandants, so would the efficiency of the suggestion hospitals depend upon the head control. We should propose, first, a model hospital as an example, and when that had proved a success, it could be copied with ease as many times as was required. As a fact, owing to the neglect of suggestion treatment by the profession at large, there are a number of persons practising suggestion who are not qualified doctors, and these are members of both sexes. Some of these suggestionists are endowed with great powers, and frequently effect cures on cases which have been pronounced incurable by practising physicians. And this not indeed in opposition to the physicians, but simply from inability to procure any direction or supervision from them, which we know many of these suggestionists would welcome. There can be no more rational objection to employing these people under medical control than there can be to employing masseurs, electricians, medical gymnasts, X-ray operators, and so on, where, for various reasons, such as, for instance, expense, medical men are not available or the medical man in charge is not sufficiently versed in the practical details. The particular scheme we most favour is that of teaching nurses, and others who have been already associated with medical work. Thus they would fit easily into their places in a suggestion hospital, for given certain essentials of personality, an ordinarily intelligent person can be taught enough in a few days for the purpose of carrying out suggestions as prescribed.

We use the term suggestion hospital in preference

to that of hypnotism hospital, for the reason that patients can be very energetically "suggestionised" without being hypnotised. There are, indeed, three forms in which suggestions may be given—viz., waking suggestion, sleepy or hypnoidal suggestion, and sleeping or hypnotic suggestion. All three are easily covered by the term suggestion. There is another point we would emphasise about this mode of treatment—viz., that to be effective it must be given in sufficient doses, and repeated often enough, and no antidotes in the way of contra-suggestions must be allowed. For this purpose there must only be one doctor in supreme control for each hospital, and all the nurses and attendants must be acting in concert with him. By this means only can an atmosphere of continuous suggestion be kept up and rapid progress made.

Our scheme, then, for a model suggestion hospital would consist of a unit of 100 cases entirely under the control of one medical man who was known to be an efficient psychotherapeutist. He would be responsible for all treatment, and with powers to call in, as occasion arose, specialists for the diagnosis of exceptional cases. Acting under him would be a certain number of persons well trained in suggestion treatment who might, or might not, be trained nurses as well. The duties of these would be to carry out daily the suggestions prescribed for each case by the doctor, and to train others in this method of treatment. Very soon a number of these could be spared to be grafted on to another model hospital as formed, and so on. These, with matron, housekeeper, nurses, servants, etc., as in ordinary hospitals, would be all that would be required.

By adopting these principles a standing need would be met, and the reproach of our present neglect would be removed.

As regards cost, whatever the expense of providing and financing these hospitals might be, it would be a mere drop in the ocean compared with what the country now has to pay in keeping and pensioning the thousands of soldiers who might by these means be restored to health and usefulness.

CURRENT TOPICS.

Chadwick Lectures on Measles.

Dr. Cates, Medical Officer of Health, St. Helens, delivered, on May 25th, at the rooms of the Royal Society of Medicine, the first of two lectures on Measles, under the auspices of the Chadwick Trust. He summarised the history of the disease and showed how in the past measles epidemics had destroyed practically one quarter of the population of a district. He pointed out that in England and Wales 10,000 children died from the disease every year and at least an equal number were left permanently disabled. Since the commencement of the war there had been serious outbreaks of measles amongst the troops in several areas.

Dr. Cates stated that the occurrence of an epidemic could be foretold with almost mathematical certainty, and there was therefore little excuse for those sanitary authorities to allow an outbreak to find them unprepared.

The lecturer said that in clean homes and in good surroundings healthy children rarely failed to make a good recovery. On the other hand, the death rate from measles among infants of unskilled labourers was nearly four times as great as that of children of the upper and middle classes.

As the main cause of death in measles was infection set up by an unhealthy condition of the mouth, nose and throat, it was hardly a matter for surprise that a heavy toll was exacted from among families living in insanitary surroundings. A child whose playground was the unswept street, whose idea of hide and seek was confined to a romp in an alley in which filth and garbage were lying, whose voyage of discovery was limited to a search for cigarette cards among the contents of ashpits, was unlikely to possess a healthy nose and throat. Dr. Cates appealed for the general extension of treatment to children under school age, and urged that the plea of economy should not be allowed to jeopardise the health of the nation. It was essential even at the present time that insanitary property should be dealt with, that regular and frequent removal of house refuse should be carried out, and that the streets and passages should be kept in a clean and wholesome condition.

In the second lecture, delivered on June 1st, Dr. Cates outlined a scheme for the administrative control of the disease. Dealing with objections raised against compulsory notification, the lecturer said that it had been stated that notification was useless, because sufficient medical men and nurses could not at the present be obtained to provide treatment for measles patients. It must not be forgotten, however, that the health of the Army largely depended on the health of the civil population. Measles had already been the cause of a considerable amount of sickness among the troops, especially in those coming from isolated rural districts, and, apart from the risk of death, there was, from the military point of view, a serious danger in loss of efficiency.

Referring to the value of systematic home visitation by trained nurses, Dr. Cates urged that sanitary authorities should appoint an adequate staff of health visitors, each entrusted with the care of a small district, so that all work relating to infant and child welfare, the prevention of disease, and the removal of conditions of insanitation might be brought within the province of one official directly responsible to the medical officer of health.

There were five or six Government Departments directing the energies of sanitary authorities, education authorities, boards of guardians, insurance committees, and after-care committees innumerable, all attempting to cope with the same problem.

To-day, when economy was vital in public as well as in private life, it was regrettable that measures were not being taken to end the scandalous overlapping of the various agencies dealing with public health.

London and its Common Dangers

In the annual report of the Coroner for the City of London and Southwark, Dr. F. J. Waldo, some conclusions of general interest have been drawn from an analysis of the year's cases. Street accidents have increased in number since the darkening of all the City lights, and may thus be laid to the charge of the Zeppelin raiders. Simple carelessness on the part of pedestrians is frequently the sole cause of accident, but Dr. Waldo recommends the building of more street refuges, the detailing of a greater number of police for traffic duty, and he urges the need for more life-guards and fenders, particularly for the hind wheels of heavy motors. Attention is drawn to some of the

deficiencies of the Pharmacy and Poisons Act. The need for further restrictions concerning the sale of opium is detailed in a copy of the correspondence which he held upon the subject with the Lord President of the Privy Council. Dr. Waldo pointed out that since 1914 there have been two laudanums in the Pharmacopœia, and that although one drop of the weaker tincture has been known to kill a baby, yet the stronger tincture alone is included in the list of poisons. To remedy this the Privy Council in February last ruled that both tinctures should come under the same restrictions. Dr. Waldo emphasises the great importance of some adequate method of preserving unidentified bodies in the cases of criminal deaths, and recommends the general installation of the Herscher formalin apparatus which he has used with success for this purpose—the only apparatus of the kind as yet installed in connection with a coroner's court. Deaths from anæsthetics are decreasing in number, but, as usual, they have all but one been caused or accelerated by the use of chloroform or a chloroform mixture. A coroner's report becomes generally useful as well as interesting when it contains an analysis of avoidable deaths with suggestions for their prevention, and we commend Dr. Waldo's example to other coroners with similar opportunities.

The History of Digestion.

The history of medical science is a record of the work of individual men possessed of an original turn of mind, of accurate power of observation, and of untiring energy. An illustration of this fact is to be found in an article entitled, "Digestion, an Historical Survey," by Dr. Raymond J. Cary published in a recent number of the *Johns Hopkins Hospital Bulletin*. The philosophers of the early days have been replaced by the practical experimentalists of to-day, as medical research has developed more and more upon materialistic lines. Numerous and varied are the theories which have found support since the time of the old Egyptian idea that digestion was the work of an indwelling demon, and indigestion but a symptom of his wrath, down to the present day. Four main theories, however, stand out, and for these men continued to contend vigorously until the latter half of the 18th century, when they were refuted by the experiments of Réaumur and Spallanzani. There was the theory of *coction*, or of food being digested by the innate heat of the body, the theory of *putrefaction*, that of *trituration*, deduced from the fact that the stomachs of turkeys can pound up glass balls, and the theory of *fermentation*. In the year 1782 Spallanzani published the results of numerous experiments performed upon a variety of animals as well as upon himself, and propounded the theory of chemical solution as the basis of digestion. From all this controversy the next real advance was made in 1833 by William Beaumont, who by his observation and experiments upon the gastric fistula of Alexis St. Martin proved the true physiology of gastric digestion, and led the way to our own knowledge of the present day.

Annual Election at the Royal College of Surgeons in Ireland.

The annual election of President, Vice-President, and Council of the Royal College of Surgeons in Ireland takes place this week. Mr. William Taylor, at present Vice-President, is not opposed in his candidature for the Presidency. Mr. Taylor is Surgeon to the Meath Hospital, and one of the leading surgeons in Ireland. There are two candidates for the Vice-Presidency—Mr. John B. Story and Mr. R. Lane Joynt. Both have been members of the Council for many years. Mr. Story is M.B. and M.Ch. of Dublin University, and is a Fellow of the Royal College of Surgeons since 1880. He is Senior Surgeon to the Royal Victoria Eye and Ear Infirmary, and Professor of Ophthalmology in the School of the Royal College of Surgeons. He is a past President of the Irish Medical Association. He practises ophthalmology as a speciality. Mr. R. Lane Joynt is M.D. of Dublin University, and has been a Fellow of the Royal College of Surgeons since 1894. He is Surgeon to the Meath Hospital. He practises general surgery, and has taken a special interest in X-ray work and bone surgery.

The General Medical Council.

The proceedings of the recent session of the General Medical Council contained little of interest to the general body of the profession. A number of penal cases dealing with the offence of "covering" the practice of an uncertified midwife were heard, and the Council showed the serious view it properly takes of such conduct. One practitioner was struck off the Register on the charge being proved against him, and others received grave warnings. We are glad to note that the Council decided to issue a special warning notice dealing with this class of professional misconduct. The Council had also the unpleasant duty of removing from the Register the name of a practitioner against whom the charge was proved of committing adultery with a lady whom he had attended professionally. This class of charge appears to be growing more frequent than in former years. Certain other names were removed from the Register on information reaching the Council of convictions in the public courts.

Suprarenal Insufficiency.

Our Paris correspondent mentions that Professor Emile Sergent has published some interesting particulars in the last number of the *Bulletin of the Academy of Medicine*, concerning suprarenal insufficiency and the *rôle* of suprarenal opotherapy in army medicine and surgery. In his opinion, suprarenal insufficiency may be due to one or two great causes: either the suprarenal glands, hitherto quite healthy, are suddenly affected with acute lesions (infections, intoxications, hæmorrhage, etc.), or these glands, previously affected with some chronic lesions and performing their functions in a very unstable fashion, give way altogether under the influence of some new factor, such as over-fatigue, traumatism, etc., and this "suprarenal debility," as the author calls it, gives rise to serious symptoms. In the armies in the field the causes are very numerous. Enteric and paratyphoid infections have furnished many cases. Dr. Sergent has seen a great number of serious cases of enteric recover under treatment with subcutaneous injections of adrenalin, rather large doses of the latter being used. Several cases of choleriform diarrhœa improved in the space of a few hours with the use of adrenalised saline solution and the administration of suprarenal extract. In cholera lesions of the suprarenal glands play a great *rôle*, and Naamé (of Tunis) has obtained splendid results with suprarenal opotherapy.

Opotherapy is applicable to the wounded and debilitated. In acute cases, at least 2 or 3 milligrammes of adrenalin must be used in injections (4 to 6 doses of ½ a milligramme each), and besides this, one or two milligrammes should be given per os. The usual doses of 5 to 15 drops of the 1 in 1,000 solution, per os, give no results whatever.

War Pyscho-Neuroses.

OUR Paris correspondent informs us that Prof. Grasset, who was put in charge of a special hospital for neurological cases at Montpellier, has published an account of the cases he has had to deal with. He divided them into two groups—first, cases presenting organic lesions; second, cases suffering from psycho-neuroses.

Of the latter he has observed all the known varieties—sensori-motor, sensorio-motor, emotional and mental. According to the classic rule, it is not the most serious local wounds which give rise the most frequently to psycho-neuroses, but those accompanied with severe shock to the system—*e.g.*, the rush of air cause by the passage of shell, hurling the patient violently to a distance of three or four metres and even more, burying him sometimes more or less completely, or the bursting of a shell quite close to the patient, killing his comrades around him. Very often symptoms appear immediately. After a more or less prolonged loss of consciousness, the patient wakes up paralysed, with the sensation of having lost some of his limbs, or blind, deaf and dumb, or trembling and anguished. In other cases the psycho-neurotic phenomena appear more tardily, sometimes after cicatrization of the wound.

From the point of view of prognosis and treatment there are (*a*) light cases, recovery taking place without any special treatment; (*b*) medium; and (*c*) serious cases. The treatment in medium cases is the ordinary classic one: hot baths, hot shower baths, static electro-therapy, massage (simple and vibratory), mechano-therapy and re-education, tonic drugs and psychical treatment. It is advisable to send the patient away as early as possible with sick leave varying from one to three months. In serious cases the question is a much more difficult one: sick leave ought to be of two or three months, renewable as may be necessary. Patients who cannot be sent home should be treated in special hospitals for the purpose.

Aberdeen Public Health.

DR. MATTHEW HAY, Medical Officer of Health for the City of Aberdeen, has now issued his report for 1914, together with abbreviated reports for 1915. The total number of births registered during the year was 3,784, after correction for transfers from or to other districts. This gives a rate of 23.0 per 1,000 of population, as against 24.6 in the preceding year. Estimated in relation to married women between 15 and 45 years of age, the rate for legitimate children was 197 per 1,000 of such women. The proportion of males to females born during the year was 100.5 to 100, and is considerably lower than in 1914, when the ratio was 105 to 100. It has been said, Dr. Hay remarks, that during or after great wars the proportion of males increases. There were 380 illegitimate births during 1915, as against 377 in 1914—an increase of 3 only. He shows by detailed analysis of most exact method that illegitimacy has decreased since the war began. The number of marriages during the year was 1,878, equivalent to 11.3 per 1,000 of the population. This is by far the largest marriage rate ever recorded for the city since the commencement of civil registration. In 1914 the rate was 9.3. During 1915 there were 3,075 deaths. This is equivalent to a death-rate of 18.6 per 1,000 of population, and is the highest death-rate in any year since 1900. The excess of the birth-rate over the death-rate was 4.4, and is the lowest on record. There were 654 deaths of infants under one year of age, or 173 deaths per 1,000 births. This is an exceptionally high mortality, and compares unfavourably with the rate of 121 per 1,000 births in 1914, and with the average of 132 for the preceding ten years.

"Free" Hospital for Children at Sidmouth.

WE are asked to announce that Mrs. Cowley, of 94 St. Aldates, Oxford, is anxious to be of service to delicate children of needy naval and military officers and others whose incomes have been adversely affected by the present war. Mrs. Cowley offers to receive such children, between the ages of five and ten, for a period of four weeks and upwards as guests in her cottage at Sidmouth, South Devon. The house is situated four minutes from the sea; the sanitary arrangements are perfect. All costs of board and residence, and also of travelling, will be defrayed by the hostess. A competent matron and nurse are in charge of the Home, and give every care and attention to the children. Milk and eggs are supplied from a neighbouring farm.

Application for admission, with a doctor's recommendation, should be made to Mrs. Cowley, 94 St. Aldates, Oxford.

Medical Students in the United Kingdom.

THE President of the General Medical Council has sent us the following official return of the number of medical students in actual attendance in May, 1916, on courses of professional instruction at the various medical schools and approved teaching institutions:—

	Men.	Women.	Total.	Men under 18.	Men from outside U.K.
First year ...	1,422	636	2,058	489	102
Second year...	783	295	1,078	26	129
†Third year...	519	163	682	0	146
†Fourth year	1,078	145	1,223	0	186
Final year ...	922	140	1,062	0	115

† A number of third-year students, who passed a professional examination at the end of the winter session, have been transferred to the fourth-year class by direction of the military authorities.

PERSONAL.

CAPT. NOEL ANTHONY COWARD, R.A.M.C., has been appointed Senior Sanitary Officer at headquarters at Havre. He was born in Leicester, and was educated at Stoneygate School, where he gained two scholarships of £80 at Blairlodge School, Scotland. There he won both classical prizes each year, and was made head prefect when 17 years old. Going to Edinburgh, he took the degree of M.B.C.M., with first-class honours. In 1913, Dr. Coward took his degree of M.D. at Edinburgh University, and his D.P.H. at Oxford.

FLEET-SURGEON JOHN FALCONER HALL, who, as was announced recently, has been appointed Assistant Director-General at the Admiralty, is a graduate of Aberdeen University. Dr. Hall, who attains to this distinctive appointment at the comparatively early age of 44, is a native of Ettrick, and is a son of Mr. William Hall. He graduated M.B., C.M., in 1893, and two years later entered the medical service of the Royal Navy. He was promoted Fleet-Surgeon in November, 1904.

DR. AGNES ELLEN PORTER, M.D., D.P.H., who has been appointed assistant medical officer at Govan Combination Hospital, Merryflatts, is one of the lady doctors who took part in the terrible retreat from Serbia, and only returned to this country in February last. Miss Porter had a distinguished college career at Edinburgh, where she graduated M.B., Ch.B. in 1906. She then proceeded to Strassburg University, and on returning after one year was appointed Research Scholar to the Royal Victoria Hospital for Consumption in Edinburgh. In 1909 she graduated M.D. and D.P.H. in Edinburgh, and in 1911 became Lister Research Scholar, Lister Institute, London. She was appointed a permanent school inspector to the Staffordshire County Council in 1915, but three months later proceeded to France as a bacteriologist. Soon afterwards she went to Serbia.

ORIGINAL PAPERS.

ON INJURIES TO PERIPHERAL NERVES AND THEIR SURGICAL TREATMENT.*

By FRANK C. PURSER, M.D., F.R.C.P.I., Major, R.A.M.C.,

Visiting Physician to Mercer's Hospital, Dublin.

A problem that is frequently before us, and one that is very perplexing, is that of deciding on the condition of some injured peripheral nerve and advising as to its treatment. It is the question on which I am asked for an opinion perhaps more often than on any other; and I acknowledge that almost every case presents some difficulty. No case requires more than these to be judged on its own merits and not by any rule of thumb. And after a most conscientious examination and consideration of the merits, subsequent developments often prove one to have been a bad prophet. Cases in which operation has been confidently recommended have improved surprisingly before it was undertaken, and others in which psychotherapy and time seemed all that was needed to effect perfect recovery, have consumed much of both with but disappointing results. This experience is pretty general. The difficulties lie largely in the number of the factors—many of them incalculable—which have to be taken into consideration; and to some extent in the examination of the patients, many of whom, to say the least of it, do not over-exert themselves in helping the examiner. By this communication to-night on the treatment of injured peripheral nerves I hope to start discussion, and to hear the experiences of others. I shall deal only with those aspects of the question which may be expected to interest the surgeon and physician alike.

In the first place, certain considerations are necessary in examining these cases.

When a mixed nerve is cut across there follows, of course, as a result, paralysis of sensation and of motion in the skin area and muscles supplied by that nerve. When a nerve is not wholly divided, but only partially, there are at least modifications of normal sensation and motion. Now, as a correct judgment of the condition and progress of an injured nerve depends on a just estimate of its loss of function, and especially on loss of sensibility in the area it supplies, I must delay a little in considering these preliminaries. Loss of sensation is two-fold; it is a loss in the cutaneous area and loss in the deeper structures, muscles, tendons, etc., supplied by the divided nerve. These two sorts of sensibility, the cutaneous or superficial and the deep, are distinct from one another. I emphasise this point, though I know it is well recognised theoretically, for I think that it is not so well recognised in practice, with the result that one reads some otherwise inexplicable accounts of very rapid return of nerve function after operation.

Cutaneous, or superficial, sensibility comprises the recognition of light touches as such and of their correct localisation. It allows one to recognise as separate two points when simultaneously applied—what has come to be known as the "compass" test. It comprises also the recognition of the painful sharpness of a pin-prick and the discrimination of temperatures even when they differ from one another by only a few degrees. Chief reliance is to be placed on the modifications of cutaneous sensibility.

Deep sensibility is less easily judged, and even in very complete injuries does not seem always to be absent. As far as our present enquiry goes, it concerns the recognition of pressure as a "touch" more or less heavy on the skin and subjacent structures, and a sense of pain when the pressure is severe. It will be readily understood from this that care must be taken in testing cutaneous sensibility not to stimulate deep sensibility. In testing the cutaneous sense of touch, only cotton wool must be used, or something equally light. Many use a finger tip, but no matter how delicately applied it is far too heavy. It causes deformity of the shape of the skin, and in so doing stimulates deep sensibility. Indeed, so much is the lightness of the object applied to be insisted on that I warn you that if you are meditating making a contribution to the study of sensation, it will not receive the respectful consideration of neurophysiologists unless the cotton wool used be of long staple like that used by jewellers. For a similar reason a wire pin, which is always blunt, should not be used for testing the sense of pain. Its application will often be acknowledged—but only as a deep touch—where a needle or a steel pin are not felt at all.

The local condition of the part to be tested must also be considered; it should be comfortably supported and pleasantly warm. And the patient himself should be comfortable and as willing as possible to give help. The man who wants his tea, or for some other reason resents your coming just when you do, will give much less accurate answers than he will give next day when the sun is shining and you are welcome. This reference to sunshine is not a mere pleasantry; there is no doubt that in any but crude testing a bright, fresh day conduces to answering quite appreciably more accurate than is obtainable on a damp, gloomy one. It is always wise to have as few spectators as possible.

When a mixed nerve, then, is divided in continuity—*e.g.*, the median at the elbow—the sensory loss is a failure to recognise pressure over some of the flexor muscles of the forearm, and a loss of sense of touch of cotton wool, of the painfulness of a pin-prick, and of temperature in an area corresponding pretty accurately to the cutaneous distribution of the nerve as given in anatomical text-books. Motor power will be lost in the muscles whose branches of supply are given off distal to the level of section.

But this statement is not exactly the truth. Those stimuli which can be increased in degree without altering their character—the stimuli of pain by pricking and of temperature are wholly lost only over an area considerably less than that of the anatomical distribution of the nerve—so that, in the case of the median, as far as the palm is concerned, while all sense of touch is lost in the anatomical distribution of the nerve, recognition of severe pin-pricks and the extremer degrees of temperature are lost only in two fingers and a portion of the palm.

If the nerve is left divided the area where all sensibility is lost tends, for some reason, to shrink

* Paper read before the Surgical Section of the Royal Academy of Medicine in Ireland, April 7th, 1916.

—and not as we might think, to enlarge; and on the motor side the muscles waste and undergo changes (that are of clinical value) in their reactions to electricity. Later, if care be not taken to prevent it, the opponents of the paralysed muscles will shorten and contractions will occur, and the tissues in the area supplied may undergo trophic changes, and any trifling injury be long in healing.

But if the divided nerve be promptly sutured, and the wound heals without suppuration, recovery of power and of sensibility may be expected. Motor power, and with it some return of electrical excitability, may be hoped for in about nine months. Sensation is recovered more slowly. Between two and four months after suture the wholly anæsthetic area begins to shrink, and by the end of a year it is altogether responsive to pin-pricks and the extremer degrees of temperature. The lighter degrees of sensation—of touch, localisation and fine discrimination of temperature—are not so quick in returning. They take twelve to eighteen months. Last of all to return is the power of localising touches correctly and appreciating the simultaneous application of two points. And even when objectively sensation is wholly recovered there remains often for a year or two a subjective sense of "something different" in the affected hand—a numbness when stimulated, or a cold feeling.

All these times are only approximate and vary greatly in different cases. Recovery depends on many things besides the skill of the surgeon. The younger the patient and the nearer to the periphery the injury, and the more assiduous the post-operative treatment, the better the prognosis. Suppuration in the wound makes the outlook worse. An injury close to the spinal cord will recover slowly and imperfectly. And recovery depends on the nerve involved. In a nerve like the musculospiral it is better than in the ulnar, which supplies muscles of highly specialised action.

These short remarks will suffice to show what may be expected, at best, in, say, a glass-cut median nerve which has been sutured within a few hours of being injured. Unfortunately a wholly complete recovery is not the rule under even the most favourable circumstances. Some weakness or noticeable sensory defect remains. Less still can it be expected in the injuries inflicted in war, where we have to deal with men who are often run-down in health, whose wounds are septic, whose muscles and nerves have been of necessity left unattended to, and who are suffering from bruises, lacerations, fractures, and other extra-neural complications. In these cases diagnosis and advice as to treatment are matters of particular difficulty; they take time to be arrived at and are rarely to be decided at a single examination.

Nerve injuries fall into two groups.

A group, numerically far the smaller, in which there is persistent total loss of function, and a group in which there is partial loss of function. A case in either group may be complicated by pain or by hyperæsthesia.

Total or partial loss of function may be due to complete or incomplete anatomical discontinuity of a nerve. Or they may be due to the pressure of exudate, hæmorrhage, fragment of a projectile, or of bone, etc., without any discernible anatomical lesion at all—a physiological discontinuity, and either total or partial discontinuity, but especially the latter, may be associated with pain or with hyperæsthesia. Let us consider the case of total loss of function.

It must be remembered that often as the result of a violent blow from a projectile a whole limb may show both motor and sensory paralysis, and this without any discernible nerve lesion at all. This paralysis—ascribed to shock to the nerve—usually clears up rapidly and completely in a fortnight. One sees little of it at home. And, again, one must remember in making a diagnosis, that paralyses of a functional or hysterical nature often occur with, or independently of, organic lesions of the peripheral nerves. It is often difficult enough to detect these, but the fact that the sensory loss is generally of a "glove" or "sock" distribution and does not correspond to a cutaneous area of any nerve or nerves, that there are no vaso-motor or trophic changes, and that the muscles react readily to Faradism will help to settle the question. And a careful enquiry into the circumstances of the injury and paralysis will also help. I have at present under treatment a rather extreme case which illustrates these points: a man with a healed but formidable looking scar about three inches below his right elbow joint. The scar surrounds about three-fifths of the forearm. The arm below the scar is very thin in comparison with the left arm, and there is total paralysis of the muscles supplied by the musculospiral and ulnar nerves, and almost complete paralysis of those supplied by the median. The man had been considered unfit for service on account of this paralysis of the arm, but on one case sheet there was a diagnosis of hysteria, and he was sent to me for further opinion. The muscles I found all reacted to Faradism readily. There was anæsthesia to touch and pain and temperature as high as the scar, and in the whole forearm, though certainly some cutaneous nerves must have escaped the original laceration. There was no vaso-motor change, and on making an enquiry into the history of the condition I found the scar was due to a crush by a cask edge ten years before he had enlisted, which was eight years ago. He had been in Flanders several months and had been sent home with a slight flesh wound in the contra-lateral shoulder. The paralysis came on suddenly on his receiving orders to join his regiment, orders which came at the same time as a domestic tragedy at home and news of the death of his brother in action abroad. I have seen several other cases where a shot through the forearm resulted in quite unequivocal functional paralysis, motor and sensory, which had been accepted as organic and reported accordingly.

But having made sure that the total loss of function is organic one must decide what to do. There is no sign or symptom that will enable one to decide whether the nerve is severed or involved in inflammatory tissue. The proper treatment in such a case seems to me to be to record exactly the sensory loss and the motor loss with the electrical reactions, but especially the sensory loss. Improvement in sensibility will be recognised long before improvement in motility, and on the change in sensory symptoms one can make some estimate as to the condition of the nerve. Should there be no change in six weeks or two months I think the nerve should be exposed. If it be found divided it must be sutured; if only compressed it must be freed. The outlook in the two cases is different. No very great recovery can be hoped for in secondary suture, and what does come is often rather long in coming. But much more may be expected both in completeness and rapidity of recovery in a nerve that is only compressed in a scar.

Cases of complete nerve division are very seldom associated with much pain. I have never seen such a case with any pain to speak of. But if it do occur it is in the same category as the nerves

in a painful amputation stump, and should be dealt with similarly.

It is of the utmost importance that the injured part should be well cared for while awaiting developments and after operation if that be undertaken. The essentials are that the limb should be rested and kept warm, and, most necessary of all, that the paralysed muscles should be kept constantly relaxed. Massage to these and passive movement of all joints to prevent contractures, and the application of any form of electricity to which the muscles may respond, are to be practised. If the muscles respond to no electric treatment its application is but waste of time. The effect of relaxation on paralysed muscles can sometimes be shown very well. I have seen cases of drop-wrist where no reasonable electrical stimulation gave any contraction in the extensors, till they had been relaxed by means of a splint for three or four days, when it was easy enough to induce one.

Now let us consider the much larger group of cases of partially divided nerves. In these cases symptoms vary from at most complete motor and sensory loss to no more than a subjective appreciation of abnormality. Often the motor loss seems, as far as one can compare the two, out of all proportion to the sensory loss. The sensory loss may be entirely overlooked in a superficial examination. But it is by it that one can judge more than by any other the progress of a case. The history of this injury will illustrate all these points. A man was hit by a bullet which fractured the humerus in the lower third and incidentally caused paralysis of the whole forearm and hand. The median and ulnar supplied areas rapidly recovered, but the muscles supplied by the musculospiral were obviously more deeply involved. The wound was a little septic at the time, and no operation was contemplated—this was three months after the injury. I was asked to see him, and I gathered that sensation was considered to be normal. When his splint was removed he had drop-wrist, and it was not easy to get any electrical reactions at all. I tested sensation, and he never failed to acknowledge the stimulus, and he made no remarks on the sensation it produced. I was going to write sensation down as perfect, but first I asked him as to comparison between the two hands—and he said it was " quite different " from the left hand. I then tested him with the compasses and tested his power of localisation. Both were very defective. One month afterwards the voluntary motor power was as absent as before, the wound had healed, and prospects of having to operate were distantly contemplated. But I found that although sensation was still subjectively " quite different " from the left hand power of appreciating two points as such had greatly improved, and localisation was perfect. Six weeks later very fair voluntary power had returned in the extensors, and this is steadily increasing. (Charts were shown illustrating this and other sensory abnormalities.)

The return of power and sensation in a partially divided nerve is due to the release of the nerve from the pressure of hæmorrhages or inflammatory exudation. It is not due to the downgrowths of proximal axis cylinders and their fortuitous linking up with the distal remains of the nerve. Once inflammation has come to an end the loss of function becomes stationary. The question then arises whether to operate or to leave alone. The general considerations which I have enumerated will guide here as in the case of a wholly divided nerve. No complete cure can be looked for, and sometimes things are made worse by operation. If contractures have formed it is waste of time operating. Speaking generally, in the majority of cases it will be found inadvisable to operate. (There is great luck in getting a good result, and the chance of making things worse is not negligible even with the most skilled. The patient will be advised not to risk a little power in his own hand for twice as much on the knees of the gods.)

But there are, I think, two very definite calls for operation. The first is where all inflammation has subsided and the patient is left with little or no power and fairly good sensibility. The risk of losing the sensibility may well be taken on even an off-chance of getting back power. And another definite indication for operation is the presence of severe pain or of hyperæsthesia. Pain is a much more common complication in partial nerve division than it is in cases of total division, and it is of a particularly, in the lay sense, " unnerving " kind. To rid the victim of it, it is well even to risk much motor loss. But the disabling factor of the pain must be weighed against the disablement of a paralysed nerve, and treatment on analgesic lines should be extensively tried before more radical measures. It might be well in some cases to consider the relief of pain by injecting alcohol into the sheath of a nerve—even of a mixed nerve. Its effects wear off in time, and by then perhaps the pain might be found to have worn off, too, and a fairly functioning nerve be left.

A propos of pain and hyperæsthesia, it is necessary to say a word about trophic disturbances. In my experience they are not very great, but in cases where there is much pain, in these the trophic changes have been more marked. Any procedure which will leave the affected area a sense of pain on pricking and even a crude appreciation of temperature will probably protect it against any gross trophic changes.

I now come to discuss what may be done at operation. It is a matter I feel shy of introducing, and I would not have had the presumption to do so at all had it not been hinted to me that my doing so would not be taken amiss.

I have spoken of the difficulties of deciding whether to operate or not, and have pointed them out rather than solved them. The difficulties of *technique* in operating are outside my personal experience, but I see that they are very great, and I have endless admiration for the skill that overcomes them.

There are some main guiding rules. One is that no operation should be undertaken unless the wound be healed, or at least aseptic. The chances of suturing giving any other result than a bulb of fibrous tissue would be none. Another rule is that a nerve must be handled with the extremity of gentleness. Indeed, it should never be caught up at all or held back on a hook, but lifted by its sheath. This is to avoid injury to the delicate nerve elements themselves and also to avoid hæmorrhage into the nerve or its sheath, for any exudation will lead to subsequent development of obstructing fibrous tissue. I have seen it done and often heard it stated that a man's leg may be lifted off the table by his exposed sciatic nerve—but the best results seem to be got when force is perfected in gentleness. And this gentleness must be extended to the dissection of scar tissue from around a nerve to avoid the exudation that may lead to more scar tissue. Some surgeons claim that they have spent up to four hours in such dissecting, and found the results justified the time and care spent. In German reports I have seen it stated that this dissection may be greatly helped by the injection into the nerve sheath of normal saline solution. Finally, in suturing a nerve the most exact apposition of the nerve fibres

in the divided ends must be aimed at. No other expedient is of any avail.

A question will arise in the numerous cases in which a spindle or bulb of fibrous tissue is found in the course of a nerve. Should it be removed or left? Neither eye nor finger can tell how much nerve fibre or how little traverses it. The loss of function found by clinical examination must be borne in mind, and if it be thought reasonable that resection and secondary suture will give better results let it be done. But no recognisable intact bundle of nerve fibres should ever be severed.

In resection the nerve should be cut with a razor. Scissors, be they never so sharp, crush the nerve fibres, and crushing is the surest way to stop their growth. The nerve should be cut till the fibrils are plainly visible, and then the two ends must be brought into the exactest apposition and under as little tension as possible—and the whole must be as dry as possible and protected from exudation as much as possible by a sleeve of vein, Cargile membrane, or layers of fat.

When a nerve is ready for suture it may be that, despite all stretching and flexing of joints to relax it, the ends cannot be brought into apposition. The prognosis is bad then. Of all the "bridges" that have been made between the ends, none offer so good a chance of success as the insertion of a piece of sensory nerve from the patient himself. And no "bridge" of nerve over four inches in length can be expected to function. I have heard of much longer "bridges" being successfully laid. But four inches is on the long side. Perhaps next best is a "bridge" taken from an amputated limb. A nerve from a rabbit or other animal is useless. And there is no unequivocal evidence that guides like a portion of vein, decalcified bone, or strands of catgut ever lead to any recovery of continuity.

Should approximation of the ends be impossible, and bridging also fail, some result may be hoped for by grafting one nerve into another. This is done by suturing an end into a notch made in a sound nerve. This operation is common enough as regards the facial and spinal accessory nerves or the facial and hypoglossal, it is less common in the case of nerves in the limbs. It has been done, however, successfully in the case of the median and ulnar. The first fully successful case was one where the median was divided in its length and one portion joined with the peripheral end of the accidentally divided musculospiral. At the end of two years and three months there was good power in all the extensor muscles of the wrist and fingers, but not of the thumb.

In these cases of nerve anastomosis there must be a sorting out and re-arrangement for transmission of impulses in the spinal cord. At first, as in the case of the spinal accessory and facial anastomosis there is an associated movement, but in the course of time, as the cord accommodates itself, this becomes dissociated. A rather more recent form of anastomosis is the insertion into the trunk of a sound nerve of both the proximal and peripheral ends of the divided nerve. Here the spinal cord has to make no rearrangements. Impulses will pass to it and from it by the normal segmental roots. The main line of the uninjured nerve has double traffic over part of its length. I have seen no detailed accounts of this method, but preliminary reports are favourable.

In isolating a "flap" of sound nerve care must be taken not to take too much. Apparently one-quarter or one-third of the nerve can be divided without noticeable loss of function—it is this fact that makes nerve anastomosis possible at all. But a nerve must not be notched close to a branch, for there the fibres going to make up the branch are segregated into one bundle and this bundle may be divided wholly in the raising of the flap.

I have, perhaps, not been as optimistic about the chances of surgery in these injuries as would be complimentary at a surgical meeting. This is not from want of appreciation of surgery, but it is from an appreciation of the very real difficulties the surgeon has to face. It is difficult enough to deal with the nerve when it is found; it is sometimes more difficult still to find it. I believe the possibilities of surgery are increasing in this field; but I think if neuroplasty is to have the success of, say, abdominal surgery, that even the simplest operation will have to be looked on as of necessity a lengthy business, so that the greatest patience and care may be exercised in securing complete isolation and accurate apposition of the nerve-endings, with the minimum of tension and the minimum of handling.

THE PROGNOSTIC SIGNIFICANCE OF A COPIOUS RASH IN TYPHOID AND SIMILAR INFECTIONS.

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MANY years ago, when I was a young house physician in the Paris hospitals, I was impressed by the case of a young woman suffering from typhoid fever which had been ushered in by marked symptoms with a profuse eruption of rose-coloured spots, because, to my astonishment, the disease ran a short, mild course, whereas I had anticipated some sort of parallelism between the gravity of the disease and the intensity of the eruption. My chief, Dr. Troisier, told me he had remarked several instances of the same kind, adding that he had heard the same thing commented upon by his seniors. Since that time, as it is my practice to scrutinise closely the skin of all my patients, I have on various occasions met with similar appearances, especially during the winter of 1914-15 in our ambulance at the front, which happened, for the time being, to be set aside for the treatment of cases of typhoid.

These cases were noted in conjunction with my colleagues, Dr. Monod, senior physician, and Drs. Bribon, Cavillier, Perrin and Ducuing, and will be published in due course with all necessary details along with several series of interesting cases which came under our observation during that period. Bacteriological examinations were too few under the circumstances, so that we are obliged to deal in one and the same group with infections of the typhoid type, whether due to Eberth's bacillus or to paratyphoids. This, however, is not of much importance, seeing that we are discussing a clinical symptom common to all infections of this group produced by organisms slightly different, it may be, but not admitting of distinction clinically.

Two series of contrary, but mutually completing, facts led us to infer that a copious eruption of pink spots was a sign of good augury. As a matter of fact, in all the serious cases in which life was threatened the eruption was discrete or, when profuse, as sometimes happened, it faded and disappeared while the infection became graver and more protracted. On the other hand, all the cases of typhoid accompanied by numerous spots proved to be mild. It is to be noted that the greatest care must be devoted to the diagnosis of the pink spots, because this is often rather difficult on an uncared-for skin, and it is easy to confuse them with the lesions of osteofolliculitis and commonplace infections. The elements should be kept under observation for several days before expressing an opinion.

Sometimes the infection was mild and the

symptoms not very pronounced: G had 102.4° F. on admission, and the temperature did not rise above 102.7° lasting only 21 days. M. had 102.7° on admission, and it did not rise above 103.8°, the fever lasting 19 days. P. had 102.4° on admission, did not rise above 103.3° (save for one day, 105.6°), and the fever lasted 21 days, with a slight relapse lasting four days, with a maximum of 102.2°. B. had 104° on admission, and did not exceed 104.2° and the fever only lasted 22 days. B. had 102.9° on admission, did not rise about 103.3°, and the fever lasted 23 days.

In some instances the course was still shorter, in spite of a rather sharp onset. B. had 103.3° on admission, did not rise above 103.3°, and the fever only lasted 14 days. R. B. had 104.4° on admission, did not rise above 104.9, and the fever only lasted 15 days.

The spots were numerous, often generalised, sometimes presenting the classical appearances, sometimes prominent and soft, sometimes papular. They came out about the eighth day (P.), the tenth day (G.), the twelfth day (M.), or still later, ushering in defervescence; on the eighteenth day in B. Even in these mild forms the relationship between the height of the fever and the number of spots is often striking.

Sometimes the attack of typhoid looks serious, grave even, with high fever on the patient's admission. The pink spots soon made their appearance in large numbers, whereupon the infection assumes a milder aspect and is cut short, the appearance of the eruption coinciding with the favourable turn—indeed, seeming to usher it in.

B. came in with a bad attack and a temperature of 104.2°, which suddenly subsided, returning to normal 16 days after admission on the appearance of the eruption.

C. had a sharp attack with a temperature of 105.1°, which soon fell, and the temperature returned to normal twelve days after the appearance of the eruption.

P. had a bad attack, with 104.2°, and here again the temperature fell to normal 18 days after the eruption appeared. The eruption came out on the ninth day of the disease, became more abundant during the next few days, and remained so down to the 18th day, diminishing only when the curve fell.

The case of B. was particularly well marked. Admitted on the ninth day with a temperature of 104° and a grave general state, it was noted that the rash was general, and so incomplete defervescence took place on the 11-12th day. Thereupon the rash "went in," and the disease relapsed, lasting 25 days.

Sometimes the typhoid is mild but protracted, and the rash keeps coming out all the time, showing, as it were, that although protracted the attack is a mild one.

Sometimes—pretty frequently, in fact—the attack runs its usual course, grave, moderate, or mild. Apart from the early rash, we may get fresh eruptive elements later on which seem to usher in the end of the disease.

We must, of course, be careful not to generalise too rashly. We get mild attacks of typhoid without a copious generalised eruption, but all the cases under my notice in which there has been a copious, generalised rash have proved to be mild—at any rate as long as the eruption remained copious. We also get grave cases which become mild without any copious generalised rash. There may also be cases of grave typhoid with an abundant rash at the onset, but in the cases under our observation the turn for the worse was accompanied by the subsidence of the better-marked papular elements, so that the disappearance of the spots with continuance of the eruption is a bad prognostic sign.

What explanation can be offered of this occurrence, which is in opposition to what one might have anticipated? We are naturally tempted to assume that a copious eruption testifies to intense infection, but these cases seem to be strictly comparable with other eruptive fevers, especially measles. In the latter disease it is a common belief that a gloomy prognosis attaches to cases of severe measles in which the rash "goes in" or "comes out" badly. Directly the eruption comes out well, the attack of measles becomes less threatening.

As far back as 1781, Borsieri suggested that in these cases the skin acted as an emunctory, and I am favourably inclined to the view that the integument plays a defensive part, endeavouring to fix and excrete microbial toxins and the products of autointoxication. I think, too, that in all probability the skin not only fixes the toxins, but burns them up. The inflammatory reaction in the skin, characterised by erythema, heat, etc., testifies to this process of combustion.

But why, in this defensive *rôle*, does the skin sometimes succeed, as shown by an intense eruption? How is it that it sometimes fails, as shown by an ill-defined, imperfect eruption? I believe that this is merely a question of the resistance of the organism. If the infection be too violent the organism is unable to react; the poisons come to the surface, but the skin lacks the energy to destroy them, so that the non-destroyed poisons invade the viscera, so to speak, by metastasis. Should the organism recover power enough to react *via* the skin, or if the activity of the skin be artificially stimulated by mustard baths or what not, the cutaneous defence again comes into action, as shown by the appearance of the eruption, the poisons are burned up, and the disease assumes a less grave aspect.

Defective resistance on the part of the organism is the principal cause of the ill-defined or "gone in" eruptions, but it seems possible that other causes may hinder the cutaneous reaction, as, for instance, the existence of a visceral inflammation (inflammation of the lungs, for example) thus preventing destruction of the poisons in the skin and rendering the disease *pro tanto* graver.

The same explanation applies in respect of the pink spots in typhoid fever: each pink spot is due to a small microbial embolus of living or dead microbes, conveyed thither by the blood. It represents a struggle, an effort on the part of the organism to kill the living parasite, to dissolve the dead microbes, and to destroy the poisons they elaborate which are set free by the dissolution of the microbes. The slight inflammatory reaction—redness, œdema, etc.—testifies to this struggle. The more pronounced the reaction, the more active the struggle, and the more efficacious the defence. It is therefore easy to grasp the fact that in an organism weakened by grave infection, reacting badly, or not strong enough to react at all, the microbial emboli fail to set up this reaction of defence in the skin, so that we get few pink spots. On the contrary, an organism attacked by a mild infection and actively resistant, reacts sharply, and every microbial embolus is the seat of an inflammatory struggle; in other words, the eruption is general. In a patient who, at the onset, displays numerous pink spots, aggravation of the infection diminishes his resistance and therefore its power of reaction; then the pink spots subside, and subsequent cutaneous emboli fail to set up any reaction. When in a grave attack the patient recovers greater defensive power as he approaches the period of defervescence, then the cutaneous reaction is shown by the late appearance of the pink spots.

Clinical observation and pathogenic considerations both suggest that the pink spots are evidence

of effectual defence on the part of the organism—afford, indeed, a sort of measure of the organic resistance in such wise that a copious eruption comports a favourable prognosis.

THE THYROID AND PARA-THYROID GLANDS.

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In a former article (*a*) we briefly reviewed the present place of the endocrinic glands in medicine, and suggested some practical points in connection with hormone therapy. We now propose to discuss in a little more detail the more important of the ductless glands, laying emphasis upon the known results of administration of the extracts of these glands, and the signs pointing to deficiency or excess of the secretion.

Naturally, the thyroid gland first deserves our attention, and for several reasons. First, more is known of its characteristics, secretion, functions, and disorders; secondly, it takes a particularly important place in medicine on account of the frequency with which disorders of its functions are encountered; and, finally, of all the ductless glands whose secretions have been utilised in the form of extracts for oral or hypodermic injections, the thyroid gland has given the best and most astonishing results. From the moment when G. R. Murray first published the results achieved by administering thyroid extract to a patient suffering from myxœdema (October 10th, 1891), great interest has been aroused in the practice of organo-therapy, an interest which Brown-Séquard's previous statements on the results of feeding with testicular extract had failed to arouse.

In 1890 Vassale in Italy and Gley in France experimented with injections of thyroid extract to animals who had been deprived of their thyroids, and demonstrated that these animals could be kept alive by such injections. This was followed shortly afterwards by the application of this discovery to therapeutics, when Murray treated his case of myxœdema by thyroid extracts and established that this condition could be cured by these means. Previous to this date, Gull and Ord in England had investigated myxœdema, and Kocher had described a condition following the removal of the thyroid which, from the similarity of its symptom complex, was shown to be identical with the spontaneous condition already named myxœdema.

As far back as 1859, Schiff discovered the fatal result which accrued from the total removal of this gland, and later when Kocher described "cachexia strumipriva," or the condition of post-operative myxœdema which followed so many of his early operations for goitre, this fact attracted wide attention. Schiff and subsequent observers also discovered that transplanting the gland beneath the skin relieved the symptoms. Unfortunately, it has now been shown that an implanted gland is very liable to absorption, and thus to lose its utility.

These researches had established the fact that removal of the thyroid gland was followed by a train of symptoms which constituted the condition named "myxœdema." (*b*) A fresh factor then arose, on account of the discovery of two pairs of small glands, situated on either side of, and deep to the lateral lobes of the thyroid, which received the name of "parathyroids." It was maintained by some authorities that the symptoms which followed the removal of the thyroid gland were due to the removal of these small glands, and in support of this theory, it was adduced that while removal of the thyroid alone was not usually fatal, removal of both thyroid and parathyroids proved rapidly fatal. On the other hand some observers maintained that it was impossible to remove the parathyroids without also interfering with the integrity of the thyroid. Forsyth concludes, from the result of his investigations that the parathyroids have no connection with tetany, and in this he is in opposition to most observers. We shall have more to say about this when we are dealing with the functions of the parathyroids.

(*a*) MEDICAL PRESS AND CIRCULAR, May 24th, 1916.

(*b*) This name came into existence on account of the believed existence of excess of muein in the subcutaneous tissues in these cases.

HISTOLOGY AND PHYSIOLOGY OF THE THYROID GLAND.

The thyroid gland belongs to the group of ductless glands—that is to say, its secretion is poured into the blood-stream direct and not by means of a duct. It is situated in the neck, and consists of two lobes, one on each side of the trachea, extending upwards to the thyroid cartilage covering its inferior cornu and part of its body. Joining these two lobes is the isthmus. The gland is surrounded by a capsule, and is composed of vesicles lined with cylindrical or cubical cells. These vesicles contain the typical colloid material, iodothyrin, which is composed of iodine in combination with an active principle which has the characters of a globulin. Its recognition we owe to Baumann of Freiburg, who discovered its existence in 1896. Herbivores possess it in abundance, as most vegetables contain iodine. The weight of the gland varies between 32 and 60 grms.; it is larger in females than in males, and undergoes changes in size at the menstrual periods and at such times as puberty and the climacteric; it is liable to swell under marked excitement and during emotional strain.

The colloid with which the vesicles are filled plays an important part in general bodily metabolism. In man there is nearly always sufficient for it to be discovered analytically (in normal health), but Wells states that the actual amount varies with the locality. It is scanty in young children and in parenchymatous goitre; unusually high in exophthalmic goitre. It has been suggested that an important function of the thyroid gland is to control the iodine metabolism of the body.

Now, what are the results of removal of the gland in man? When we come to review the knowledge which experimental physiology has given us we are at first rather bewildered by the apparent contradiction which faces us. Early observations upon the effects which followed removal of the gland in animals showed that, in carnivora, the effects were very severe and often fatal, tetany supervening and the animal dying from cachexia. In herbivora, however, the results of such an operation were often exceedingly slight, and were confined to a slight cachexia, but sometimes a rapidly fatal result ensued. The first inference to be drawn from this was that a meat diet was the important factor which accounted for the difference between the effects in carnivorous and herbivorous animals. Gley, however, showed that the explanation was quite different, and he proved that the parathyroids (one pair, now usually known as the "external parathyroids") were responsible for the wide difference in the results. He demonstrated that these small glands were so situated in carnivora, that when the thyroid was removed, the parathyroids were also removed; whereas, in herbivora they were as habitually left behind. When the operations were made identical the results were approximated.

This originated the view now widely held, which regards the nervous symptoms following removal as attributable to the loss of the parathyroids; the effects of thyroid removal alone being, in the young, an analogous condition to cretinism, in the adult a cachetic condition. Indeed, in the young animal, the effects of thyroid extirpation are much more marked than in the adult animal. A few of the changes produced are striking. As we have already said, a cretinoid condition results, with delayed ossification of epiphyses, diminished development of the bones of the skull, protuberant abdomen, relaxation of the ligaments of the spinal column, and sexual infantilism. Alterations in the growth of the hair are observed in some species, and, most interesting of all, an extensive atheromatous degeneration of the aorta is found, which bears out the hypothesis that the function of this gland is concerned with calcium metabolism. Horsley had surmised previously to this discovery that many of the features of thyroid inadequacy resembled those which characterise senile decay.

Where thyroid secretion is excessive, we know that there is increased calcium leaving the body; and, in those patients exhibiting deficiency of thyroid, we may assume that increase of the calcium salts at the disposal of the metabolism results in an atheroma—a laying down of this substance in the walls of the arteries.

After thyroid extirpation there are several changes which deserve special mention. Firstly, there is a marked retardation of metabolism in general, nitrogenous metabolism is greatly reduced, fat metabolism is likewise diminished, as the tendency to the deposition of fat in myxœdema shows. As opposed to this, however, the animal without a thyroid exhibits excessive tolerance to carbohydrates: it can take abnormally large amounts without suffering from glycosuria. The reduction in the metabolic exchanges naturally diminishes heat production, and this point is of interest from the practical standpoint, human beings with deficient thyroid secretion being much more susceptible to the cold, and suffering increased discomfort in the winter months. As opposed to this, patients with Graves's disease rarely suffer any inconvenience from cold, but feel the heat of the summer months to be almost insupportable. As is well known, they are nervous and restless, and the increased tissue wastage produces a rapid loss of flesh, and in some cases actual emaciation.

Turning now to the parathyroids, which it will be remembered are of more recent discovery, we find that there are two pairs of these glands, situated, as we have already said, in close proximity to the lateral lobes of the thyroid gland itself. In structure, they bear some resemblance to this latter gland, resembling it, however, more in its embryonic characteristics. They are formed of columns of granular epithelium cells, and show a very vascular connective tissue between these. It has been stated that, if these glands are left when the thyroid has been removed, they undergo a marked hypertrophy.

To Sandström belongs the credit of first accurately describing these little glands. His view was that they were in reality embryonic rests of thyroid tissue proper. At the present time, although our knowledge of their functions has advanced somewhat, much of the knowledge we possess may be described as more speculative than proven. MacCallum came to the conclusion that they controlled in some way the calcium metabolism of the body. Calcium moderates the activity of nerve cells, therefore when the secretion of the parathyroids is deficient, and calcium is lost from the nerve cells, the patient will suffer from an exaggeration of nervous excitability. This corresponds to the surmises as to the causation of the nervous symptoms which are manifest when the thyroid has been extirpated. In support of this view, the administration of extracts of the parathyroid glands in cases of tetany has been proved to be efficacious in controlling the convulsions. It will be remembered that tetany is a prominent symptom after extirpation operations in animals. Likewise the administration of calcium salts will control the symptoms of tetany.

Opposed to the views just quoted, some observers believe that the parathyroids are portions of the true thyroid gland, that they have become separated from the gland itself, or that they secrete the same colloid, although they have not as yet formed vesicles; or that they develope into normal thyroid tissue, intermediate types having been noticed.

It is stated that if all four parathyroids are removed, the animal succumbs rapidly, no matter whether the thyroid is left intact or not. If one parathyroid be left, death does not usually ensue, although tetany may be brought on. It has also been said that changes in these glands are very common in cases of tetany in children, in pregnant women, and in osteomalacia (a disease associated with defective calcium metabolism). This would seem to be supported by the beneficial effects of calcium administered by the mouth (it would tend to replace the excessive loss of calcium owing to the defective parathyroid secretion).

With the few facts at our disposal, and the many speculative theories based thereon, it is natural that many diseases should have been attributed to an abnormality of these glands. To take one example, it has been suggested that paralysis agitans may be due to disease of the parathyroid glands, but unfortunately it does not appear to benefit by the exhibition of extracts of these glands. This is, of course, not tantamount to a refutation of this theory, as it may mean that the extract undergoes changes during its passage through the body, which rob it of its natural properties, so that it is unable to replace the normal secretion which should be delivered into the blood-stream. The only instance which, so far as I am aware, has been published in which parathyroid extract appears to have been absolutely successful, and to have been, if one may use the expression, specific, is described by Hertz in the *Practitioner* for January, 1915, in an article on the parathyroids. Briefly, this case was a man of middle age, who had suffered from an enlargement of the thyroid gland, and had undergone an operation in which the greater part of it was removed. He remained well for two years, and then suddenly became very restless, tremulous, and developed fibrillary tremors and other signs which closely resembled Graves' disease. His hair ceased to grow, he became impotent, his bowels were loose, and his weight decreased very rapidly.

No treatment was of much avail, and the administration of dry thyroid gland aggravated the symptoms. He was given dry ox parathyroid by the mouth, and from that day he began to improve, became stronger, increased very markedly in weight, and returned to work. Not until he had been taking the parathyroid gland for six months did his sexual powers return. Hertz concludes the account of this very interesting case: "His weight in February, 1914, had risen to 189 lbs.; he felt perfectly well and strong and no trace of nervousness remained, although he was working very hard."

Here, apparently, was a case in which the secretion of the parathyroids was deficient, and where its administration by the mouth was able to replace the normal secretion.

If this latter surmise be correct, it would seem that it is possible for an analogous treatment to

that of myxœdema to be initiated if only we could arrive at an accurate diagnosis. It would support the school which believes in the separate functioning of the thyroid and parathyroid; and might eventually show us where we are lacking in the treatment of exophthalmic goitre. It is certain that the removal of part of the thyroid does not cure this disease, although it may ameliorate the symptoms for a variable time. If the nervous symptoms are due to excess of thyroid secretion, then removal of part of the gland should counteract the excess. But if this group of the many symptoms of Graves's disease owes its existence to an abnormality of the parathyroids, we must alter our surgical treatment of this disease.

On the other hand, we have yet to study the views of that school which has returned to Gley's original belief: that the parathyroids are part of the thyroid gland, that they are an embryonic and partly-developed thyroid tissue. In support of this view, it is stated that post-operative tetany is greatly benefited by administering thyroid gland by the mouth, and that pure parathyroid, even in larger amounts, has not given the same results. It would appear from this that tetany owes its origin to deficient thyroid, and not necessarily deficient parathyroid; although the ordinary sheep's thyroid gland contains parathyroid substance.

This school, therefore, regards the parathyroids as part of the thyroid, and not separate structures; their function would be similar, and, it follows from this hypothesis, that the diseases which have been tentatively attributed to the parathyroids (mainly on account of the similarity which their symptom-complexes bear to those produced experimentally) must in reality owe their origin to the thyroid—assuming that they are in any way connected with this gland. This is comforting, as it narrows the field of inquiry—it leaves us one set of riddles to solve instead of two. But we must admit that this view is not widely accepted, mainly on account of the many small facts which have been collecting—albeit slowly—to show us that the parathyroids are undeserving of neglect.

We must now leave the subject of the parathyroid glands, and, before concluding this article, briefly review the theories which endeavour to account for the work of the normal thyroid gland. What is the function of the thyroid? Does it govern metabolism? Is it a "vital antiseptic"? Or is it concerned with growth alone? The only way in which we can attempt an answer to these questions is to give some few facts and more theories dealing with the function of this gland.

Firstly, then, the thyroid gland possesses the peculiar property—peculiar in the sense that it is not shared, so far as we know, by the other endocrinic glands—of being able to store its secretion. This is proven by the fact that in cases where the gland has atrophied or been removed, its secretion can be replaced by artificial ingestion. We quite naturally turn to the colloid as being the stored-up secretion, and, indeed, we are justified in so doing, as there is evidence to show that this substance arises as droplets in the epithelial cells lining the vesicles (Dale). Again, this secretion contains a relatively large percentage of iodine (.2 per cent.), and on this fact, or partly on this fact, has arisen the theory that the thyroid has a phagocytic or antitoxic action. In young animals, however, the iodine content is very small, and in adult animals it appears to be a direct ratio to the iodine content of the food. On the other hand, there is no reason to suppose that the power of the body to resist intoxication is raised when iodine or the iodides are given by the mouth: although Hunt found that young thyroids had some power to raise the resistance to a particular substance (acetonitrile), which power ran more or less roughly parallel to the iodine-content.

In this connection, the action of iodides upon gummata is of interest; and, as pointed out by Rendle Short, the beneficial action of these drugs is in reality due to the increased action of the thyroid which is engendered by the administration. He says: "I have found thyroid extract quite as effectual as iodide of potassium in healing tertiary syphilitic ulcers." In speaking of the action of iodides on gummata and atheroma, he says: "In cases of myxœdema arterio-sclerosis is early and intense. The same is true in animals after removal of the thyroid. Eiselsberg gives a number of very convincing photographs of intense atheroma of the aorta in his cretin lambs in which the thyroid had been removed in early life. In the second place, thyroid extract has a wonderful power over young connective tissue, as is seen by the way in which it absorbs the subcutaneous thickening of myœdema and cretinism. It is not surprising, therefore, that it should be able to deal also with gummata and atheroma. (*a*)

The theory of toxin-neutralisation states that the secretion of the thyroid has the power to neutralise toxins which find their way into the blood-stream. It goes on to maintain that these toxins (of albuminoid nature) are absorbed from the alimentary canal and undergo iodisation in the thyroid by means of its secretion. It will be remembered that Lane maintains that atrophy of the thyroid gland is one of the features of chronic intestinal stasis. Is this the result of overwork? Hardly, for overwork produces hypertrophy, not atrophy; and yet, if the symptoms and signs attributed to intestinal stasis owe their origin to toxæmia, and the thyroid is the neutraliser, then (to reconcile the two theories), the thyroid should be enlarged, *not* atrophied. In other words it should be overworked, not idle.

We know, however, several facts of importance about the thyroid to balance this tangle of theories. Firstly, we know that a train of symptoms follows its deficiency or absence, whether produced experimentally or arising spontaneously, and that these symptoms will yield to thyroid feeding. The results of an extirpation operation in young animals differ only slightly from the condition which we know as cretinism, while the adult analogy of this we encounter as myxœdema.

Thyroid is therefore concerned with the growth of bone; with the development of the body; and with a normal circulation. It has been suggested that the reason why the colloid is scanty in the young is that it is used as rapidly as it can be manufactured by the gland. As we shall see when discussing thyroid deficiency, the clinical pictures of the slighter forms of inadequacy require discrimination to discover, and are as yet not sufficiently definite for their wide acceptance. But the above facts lend themselves to further investigation.

Again, in the adult, there can be now little doubt that absence or diminution of the secretion produces —or helps to produce—a condition of secondary anæmia. Whether this argues any direct connection with the hæmatopoietic system, we are unable at present to say. That the thyroid is a direct circulatory stimulant there can be little doubt; for the slow pulse, cold extremities, sluggish circulation, and deficient action of the sweat-glands in sub-myxœdema are very well recognised.

The interaction of the thyroid with the other ductless glands is at present unknown, but the future will probably show that the relation between

(*a*) "The Newer Physiology in Surgical and General Practice." By A. Rendle Short. Third edition. Pp. 82-83.

the thyroid and some of the other endocrinic glands, notably the spleen, is a close one.

We must here leave the discussion of the thyroid and its small neighbours, realising only too well that many blanks still remain to be filled up—which further light on this most difficult subject can alone do. (*b*)

"AVIATOR'S SICKNESS."

BY JOHN KNOTT, M.A., M.D., F.R.C.S.I.

THE discussion of one of the associations of aviation in your columns of May 3rd—an issue of THE MEDICAL PRESS AND CIRCULAR now permanently associated in my memory with the very effective hold-up of postal functions produced by our explosive Sinn Fein upheaval—has recalled to my recollection the existence of a French book which first saw the light somewhere about 1880, and of which a copy is at present buried away "somewhere in" the disorderly contents of my chaotic library. This prognostic volume dealt, and with clairvoyant anticipation, with a large proportion of the creations and achievements of the (then "coming") "Twentieth Century." It was very liberally illustrated, and the author—evidently a genius of the Jules Verne school—has surely good reason, if still living, to feel proud of the productions of the inspiration afforded by his prophetic gift. For there the reader was treated, among other delights, to views of sundry and manifold flying machines: bird-shaped, fish-shaped, fly-shaped, cigar-shaped; engaged in conveying passengers across land, and over sea: on business trips, holiday and honeymoon excursions, touring pilgrimages, migratory movements, journeys of emigration, mercantile transmission, postal transit and delivery, etc., etc., with interjected halts at central metropolitan stations, and punctuated delivery of amatory epistles at upper bedroom windows, in fashionable town areas and at aristocratic country mansions. Such prophetic projection of the *idea*—in the literal sense of this pregnant term—on the cinema screen of mental vision has surely proved the source of the inspiration which has so successfully produced a teeming harvest of "modern" miracles of science and conquest of nature.

There can be no serious question, as I believe, of the front-rank position of the wireless, the cinema, and the air machine among the items of the vast congeries of gifts which have been conferred by science upon humanity during the past few years, as majestic and enduring monuments of the triumphal achievement secured by the cosmopolitan leaders of the contemporary progressive march of intellect. No other age of the world's record has been known to produce, within corresponding limits of time, anything comparable to the expanding conquest of Nature's mysteries and obstacles that has been effected during the expired decade and a half of this our own wonderful twentieth century. And nothing worthy of mentioning in the same breath with the three above-named can now be brought into the court of skilled historic scrutiny—with the probable exceptions of the Röntgen rays and the radium emanations. These, too, have been found to levy their respective tolls of personal injury—on the cutaneous integrity of their votaries. They have also revealed the association of discounting drawbacks in the culture and application of their respective, apparently almost miraculous, properties and powers. And while the former has proved productive of a good deal of clinical neglect of the culture of the powers of skilled audition, trained visual conception, and the proverbial *tactus eruditus*—to say nothing of the collateral revelations procurable by the evidence of smell and taste—the mysterious properties of the latter have lent themselves all too readily to the criminal pretensions of the licensed quack, and the woeful gullibility of a gaping and suffering public, always on the vain look-out for the advent of, a messianic remedy possessed of the gift of redemption from all previously incurable infirmities of the flesh. But the hour has not yet come, and humanity has still to bear its continuously modified burden, while unceasingly goaded onwards by the stimuli of mental and physical tension and torture; some old and others new! The most dismal of the facts recalled by such reflections is, of course, presented by the present inter-relationship of the leading communities of our old-world civilisation—all of which are just now eagerly occupied in the concentration of all their capitalised knowledge and intellectual culture, with all their available mechanical and specialised professional skill, on the sole purpose and methods of mutual destruction. A consuming fever of thought and action!—how consoling it would be if we could only dare to hope that the concluding crisis would be succeeded by permanent immunity.

One of the inevitable pathological excrescences of the (very practical) science of aviation was bound to germinate in the minds of the amateur physiologists of limited education who elected to discuss the all-important question of the maintenance of the equilibrium in this connection. The characteristically Gallic suggestion of the function of the semicircular canals in furnishing the sense of direction and capability of maintenance of equilibrium could not fail to bear fruit here. The curiously diagrammatic arrangements of those unique constituents of the complicated auditory apparatus have, times without number, produced quite a mesmeric effect on the eagerly inquiring medical student of the second year curriculum. (I can answer for one.) Their arrangement is so strongly reminiscent of that of the co-ordinates of Descartes, with the aid of which the semi-inspired founder of modern algebraic geometry located the position and relative direction of a point in space. But the gilt veneering has now been long since worn off, and the crude metallic fact remains that there exists no truly logical evidence of such location of a function—of which the actual centre is necessarily placed in the nerve cells of the auditory area of the cerebral cortex—any more than of the validity of the location (by the aforenamed Descartes) of the human soul in the *conarium* (*glandula pinealis*): *because* the soul must have a material organ; this organ must be a part of the brain, the organ of intellect; it must also be *azygos* in arrangement, central in position, and unique. As well might one have argued that the very peculiar *snail-shell* form of the adjacent *cochlea* provided the innate *laziness* which a trans-Atlantic philosopher has pronounced the first instinct of humanity, and that the sugar-tongs outline of the forceps of Reil is the cerebral locus of man's taste of sweetness. Other enthusiastic inquirers have used some of the above arguments for location of the soul: in the *corpus callosum*, in the *septum lucidum*, in the cavity of the fifth ventricle itself, in the sub-arachnoid space, in the heart, in the blood, in the animal spirits, etc. But Van Helmont, "the Father of Modern Chemistry," went one better and at least 90° lower, for he actually located the immortal principle of life at the pylorus! (Was he a martyr to dyspepsia?

(*b*) The next article in this series deals with "Graves' Disease."

Did he receive a solar-plexus knock-out thrust among his school and college experiences? Or was it that he was really, if not nominally, of German ancestry?)

Then the unlucky semi-circular canals have been saddled with the loss of power of maintenance of verticality after Tommy Burns's lightning operation. An eminent metropolitan surgeon was made to say so, after Tommy's triumph, in an "interview" which displayed more mastery of pugilistic than of physiological science. But the barefooted young ruffian of an Irish village seemed always to know (? by instinct) the efficacy of "a clout at the butt o' the lug" with the threat of which he bullied the smaller boy. So did that proverbially skilful operator, Jack Ketch, when he located his sinistral knot at that part of his patient's surface! And the very obvious *rationale* is that the brain rests there, gravitationally, on a dense unyielding bone, with next to no fluid pad beneath; while the position also affords the best leverage for a disturbing side-thrust, which throws the delicate machinery quite as *anæsthetically* out of functional commission as if it had been subjected to the lacerating Haughtonian procedure.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

MEDICAL LAW REFORM.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—At the end of my last letter I said I would to-day describe the attempt that was made in 1858 to provide the profession with what may be called a complete Legal Constitution and to explain at least its partial failure. By the Act of 1858 the General Medical Council was set up with the powers it still wields. Its functions were the supervision and control of medical education and examinations and the establishment of a Register of qualified practitioners. It was also endowed with certain disciplinary powers over qualified practitioners. The Council, during its career of over fifty years, has been the subject of much criticism; some perhaps just, but largely put forth under mistaken impressions, the Council's activities being strictly confined within narrow statutory limitations. I write of the Council only in regard to its connection with my main theme. By its reforms in education and examinations the Council has raised enormously the real qualification of the young medical man, and it is safe to say that on admission he is more fully prepared for his calling than is the neophyte of any other learned profession. By the extent and difficulty of the examinations there have been weeded out the classes of idlers and men of low intellectual capacity. Those entering the medical profession nowadays know that they are devoting themselves to an arduous occupation which, with extremely rare exceptions, will provide them with neither wealth nor fame nor anything beyond the wants of a frugal man—one prepared to die in harness. After the passage of the preliminary educational examination the curriculum occupies at least five years. No statistics are available, but a large percentage of practitioners possess degrees in arts or science of one or other University, besides their medical qualifications. A very large percentage also take up much higher degrees than are obligatory. This is a most important point, and may be emphasised by an illustration within my own recent experience. Some short time ago a vacancy occurred in the staff of a local cottage hospital. Three candidates presented themselves. Of these one was a medical and surgical graduate of London; the second of Cambridge, and the third was F.R.C.S.Eng. These men were all obscure country practitioners. Their qualifications were unknown to me—their friend, and, of course, were absolutely unknown to the public. They had always intended to devote themselves to general practice. Love of their profession and desire to make themselves masters of it had made them sacrifice the time and labour called for. Men like these are to be found throughout the country, in town and rural districts. Their qualities are, of course, known to their brethren, and they bring their skill, and especially their surgical help, to many cases which formerly must have been injured or perhaps killed by removal to some distant hospital. The existence of this large number of highly accomplished men within the body of the profession is mainly due to the work of the General Medical Council. It is necessary to note for the purposes of my argument that a great number of medical men are engaged in scientific research of the utmost value to the public, but which brings to them neither honour nor adequate remuneration. Another great army of doctors, public medical officers of various grades, are out as a corps of hygienic missionaries, and whilst improving the public health are practically taking the bread out of the mouths of their profession, albeit with its hearty consent. I have never been a practitioner of medicine, and for the last twenty-five years have been a mere looker-on. I cannot, therefore, be fairly charged with boasting about myself when I describe my profession as a noble calling. It contains at least a far greater proportion of men leading lives of self-sacrifice than is to be found in any other calling, not excepting the ministry of religion. It might have been thought that a profession like this—a great body of men of proved character and high scientific attainments—would have had some voice and authority in all matters of State in which they were even remotely connected. It is, however, a deplorable fact that the profession has virtually no political power or authority of any kind, even in cases in which their counsel is absolutely necessary if the welfare of the State is to be effectually safeguarded. It is only necessary to mention the Insurance Act to make the medical reader realise this fact. It can be further illustrated by the history of the failure of the profession to bring about amendments of the Medical Act of 1858, which should render to the public the protection which the preamble of the Act promised. The failure of the profession to establish any political power has been mainly due to the default of the British Medical Association. I repeat that I impute no blame for this state of things to any officer or party within the Association; it seems due to some inherent faults in the constitution of the Association or defects in its administrative machinery. It has had the power in recent times to gather the opinions and voice the demands of from 20,000 to 30,000 men—its members—selected from what is best in the profession, and it has entirely failed.

I must, with your permission, put off to my next letter discussion of the flaws in the Act of 1858, to which I have here merely alluded.

I am, Sir, yours truly,

HENRY SEWILL.

The Old Rosery,
Earlswood Common.
June 1st.

"SINAPIS" AND THE B.M.A.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Pope says, "To err is human, to forgive divine." So, "Sinapis," even though you are not a god, you can for a brief moment assume divinity and pardon my human errors. As this is my final appearance, it is my duty to report progress. In the issue of the MEDICAL PRESS AND CIRCULAR, May 3rd, you inform your readers that some years ago you resigned your membership of the B.M.A. Your nature is kindly, so far we agree; that you take an interest in the B.M.A. is apparent to everybody. It looks rather like "the call of the old love"! You cannot forget her. You *appear* to be angry in order to be kind. To calm your anger, think of Athenodorus, who, when taking his leave of Cæsar, said, "Remember, Cæsar, whenever you are angry to say or do nothing before you have repeated the four-and-twenty letters to yourself"—which you will note means repeating B.M.A. eight times.

Now, you have declared your desire that the B.M.A. shall be an entirely scientific body. Medico-political matters can look after themselves until such time when some competent organisation is born, trained, and has reached man's estate; but, unfortunately, the Government, in dealing with medical matters, tarries not, but prepares and delivers its attacks upon the plan of hustle and bustle.

Now, "Sinapis," pray do not fear the B.M.A., but make the B.M.A. fear you. Rejoin the Association, become a Representative, and expound your views. In conclusion, sleep over Canning's words and ponder—

"And finds with keen, discriminating sight
Black's not so black, nor white so *very* white."

I am, Sir, yours truly,

S. J. ROSS.

Monkhams, Bedford.
June 6th, 1916.

To the Editor of THE MEDICAL PRESS AND CIRCULAR

SIR,—"Moritur et oritur." I note that Dr. Stephen John Ross, of Monkhams, Bedford, is once more giving signs of life in your columns: on this occasion in the cause of the B.M.A., by a research into the theological psychology of "Sinapis," which, nevertheless, has brought him fame "at the Periphery."

On his return to activity, Dr. Ross might fairly consider his obligations to his labours, yet incomplete. Your readers may remember that as a new member of the Council of the Medical Defence Union, and as the Council's champion, he debouched in your issues of September 15th and 29th last, but so far has failed to face the matter-of-fact questions in this connection put to him in your issues of September 22nd and October 13th last.

Let us hope that Dr. Ross will prove of greater utility in the B.M.A. than he appears to have been in the Medical Defence Union.

I am, Sir, yours truly,

DENNIS VINRACE.

Gower Street, London.
June 3rd, 1916.

WE have received the following for publication:—

TREASURY GRANT OF 2s. 6d.

DEAR SIR (or MADAM),—Have you observed that the Insurance Commissioners have recently adopted the system of arbitrarily imposing fines for alleged breaches of the conditions relating to the Treasury grant of 2s. 6d. per insured person per annum? This sum is annually voted by Parliament to make up the total capitation fee of 7s. According to the practitioners' agreements, for this grant to be paid, it is stipulated that:—

(1) Records shall be kept of attendances.

(2) Certificates shall be issued in compliance with the Rules.

(3) A prescribed standard of treatment shall be maintained.

As the Commissioners have been persistently inflicting penalties for the alleged breach of these conditions, the Council of the Panel Medico-Political Union sought the opinion of the eminent lawyer, Mr. F. Gore-Browne, K.C. He has stated that the letter of the law requires the "damages" or "loss" sustained in respect of an alleged breach of contract to be proved and to be such as would be assessed by the Courts, and that it is, in his opinion, illegal for the Commissioners to fix an arbitrary penalty.

In view of the fact that the Commissioners have instructed Insurance Committees to withhold sums ranging from £50 to £2 for insufficient or incorrect record cards, the legality of the position is a matter of considerable importance to the panel profession. The danger to which those practitioners were exposed who have been penalised may be your danger in the near future.

The question of the desirability of testing the Commissioners' right to impose arbitrary fines will be discussed at the annual general meeting of the Panel Medico-Political Union, which will be held on Wednesday, June 7th, 1916, at 3.30 p.m., at the Connaught Rooms, Great Queen Street, Kingsway, London, W.C. You are cordially invited to attend and to express an opinion on the subject.

Yours truly,

A. WELPLY,
General Secretary.

Panel Medico-Political Union,
47 Fleet Street, London, E.C.
May 29th, 1916.

P.S.—If you are not already a member of the Union, you will be asked not to vote upon the other business on the agenda paper. Full particulars as to membership will be gladly furnished on application.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF SURGERY.

MEETING HELD FRIDAY, APRIL 7TH, 1916.

Mr. ALEX. BLAYNEY in the Chair.

REMARKS ON INJURIES TO PERIPHERAL NERVES.

MAJOR F. C. PURSER read a paper on this subject, which will be found under the heading of "Original Papers" on page 511.

BULLET INJURIES OF NERVES AND THEIR TREATMENT.

Mr. W. S. HAUGHTON read a paper on the above subject. He dealt chiefly with the mechanical effects of high velocity bullets striking the tissues, and described the different types of lesion that resulted in the nerves in the neighbourhood of wounds.

MISS LOUISA EDWARDS, of Brighton, left £250 each to the Alexandra Hospital, Brighton, and Royal Sussex County Hospital; £50 each to the Brighton and Hove Hospital for Women, Brighton, Hove and Sussex Ear and Throat Hospital, and the Sussex Eye Hospital.

SPECIAL REPORTS.

GENERAL MEDICAL COUNCIL.

ONE HUNDRED AND THIRD SESSION.

THIRD DAY, THURSDAY, MAY 25TH, 1916.

The President, Sir DONALD MACALISTER, in the Chair.

The minutes of the last meeting were taken as read, and confirmed.

The PRESIDENT announced that the Acting Registrar had been directed to restore to the *Medical Register* the name of Mr. Casper Denis Downing.

The Council proceeded to the resumed hearing of the case of Mr. Daniel Evans Powell, adjourned from the previous day, whereupon Mr. Powell's solicitor stated that neither Mr. Curtis Bennett nor Mr. J. A. C. Keeves, counsel for the defence, would be able to be present at that stage; but that he (Mr. P. W. Butcher) would be prepared to conduct the defence, and preferred that the case should now proceed.

In the temporary absence of Mr. Powell, however, the Council decided to proceed with other business.

The Council proceeded to the consideration of the case of Henry William West, registered as of 352 Vernon Road, Old Basford, Notts, M.R.C.S.Eng. 1892, L.R.C.P.Lond. 1892, who had been summoned to appear before the Council on Wednesday, May 24th, 1916, at 3 p.m., on the following charge :—

"That being a registered medical practitioner you were on November 1st, 1915, convicted at the City of Nottingham Assizes of feloniously killing and slaying one Harriet Ann Hodgkinson, and sentenced to seven years' penal servitude."

Mr. West was called, but did not answer to his summons, nor was he represented by counsel or solicitor.

The Acting Registrar having read the notice, the Council's solicitor laid the facts before the Council.

He read the certificate of conviction which he put in, and also read extracts from a newspaper report of the trial.

The Legal Assessor read Mr. West's letter in reply to the solicitor's notice of inquiry.

The Council deliberated on the case *in camerâ*.

Strangers having been re-admitted, the PRESIDENT announced the judgment of the Council as follows :—

Mr. Harper : I have to announce to you that Henry William West has been proved to have been convicted of the felony alleged against him in the notice of inquiry, and that the Registrar has been directed to erase his name from the *Medical Register*.

Mr. Powell having arrived the Council proceeded to the consideration adjourned from Wednesday, May 24th, 1916, of the case of Daniel Evans Powell, registered as of 101 High Street, Tooting, S.W., M.B., C.M. 1894, U.Glasg.

Mr. Powell attended in answer to his notice, accompanied by Mr. Philip Webster Butcher, of the firm of Messrs. Webster Butcher and Sons, solicitors.

The Central Midwives Board, the complainants, were represented by Mr. Julius Bertram, their solicitor.

Sir Francis Champneys, President of the Central Midwives Board, withdrew, and the PRESIDENT announced that he would take no part in the proceedings.

The Council's solicitor having read the notice, Mr. BERTRAM proceeded to open his case.

He informed the Council that as he had been unable to procure any shorthand report of the proceedings against Mrs. J. W., at Bow Street, and had been refused access by the Public Health Committee of the Wandsworth Borough Council to the notifications of births, he had difficulty in tendering first-hand evidence, but proposed to put in evidence as to the proceedings in the form of the notes and oral testimony of the solicitor who conducted the prosecution.

Mr. BUTCHER intimated that he took no exception to the proposal.

Mr. BERTRAM called Mr. George William Duncan, Secretary of the Central Midwives Board, as a witness, and examined him as to the accuracy of his declaration. Mr. Duncan was cross-examined by Mr. BUTCHER, and answered a question put to him by a member through the Chair.

Mr. BERTRAM called Mr. John James Greenwood, solicitor in the solicitor's department of the Council of the administrative County of London, as a witness, and examined him as to the accuracy of his declaration.

Mr. Greenwood was cross-examined by Mr. BUTCHER.

Mr. BERTRAM called Miss A. E. T—— as a witness, and examined her as to the truth of the accuracy of her declaration, which she desired to correct in some particulars.

She was cross-examined by Mr. BUTCHER, and answered a question put to her by a member through the Chair.

Mr. BERTRAM called Miss E. D—— as a witness, and examined her as to the facts of her confinement. She was cross-examined by Mr. BUTCHER, and answered questions put to her by the Legal Assessor, and by members of the Council through the Chair.

Mr. BERTRAM called Mrs. Lily May Best and examined her as a witness. She was cross-examined by Mr. BUTCHER, and re-examined by Mr. BERTRAM.

Mr. Bertram called Mr. Edwin Samuel Wood, one of the inspectors, under the Public Health Acts, of the London County Council, and examined him as to the notifications of the births set forth in Mr. Duncan's declaration. He was cross-examined by Mr. BUTCHER, and re-examined by Mr. BERTRAM, and answered questions put to him by members of the Council through the Chair.

This closed the case for the complainants. Mr. BUTCHER then called Mr. Powell as a witness on his own behalf, and examined him. He was cross-examined by Mr. BERTRAM, and answered questions put to him by the Legal Assessor. He also answered questions put to him by members of the Council through the Chair.

Mr. BUTCHER then addressed the Council on behalf of Mr. Powell, and Mr. BERTRAM did not desire to address the Council in reply.

Strangers having been re-admitted after the Council had deliberated *in camerâ*, the PRESIDENT announced the decision of the Council as follows :—

Mr. Daniel Evans Powell : The Council has carefully considered the charge made against you, which, in effect, was that you had by your assistance knowingly enabled a woman not certified under the Midwives Act, 1902, to attend women in childbirth under cover or pretence that such women were attended, or to be attended by you, or by her under your direction, thereby enabling her to practise as if she were certified.

The facts alleged against you in the charge the Council has found to be proved.

The Council takes a very grave view, from the public point of view, of the danger which arises from medical practitioners lending their names for such a purpose and "covering" the practice of unqualified or uncertified women, under whatever pretext they practise midwifery or otherwise attend and treat women in labour. But in order to give you an opportunity of reconsidering your position in relation to this matter, the Council has postponed judgment in your case till the next Session, in November, of which you will receive due notice. You will then be required to attend, and to produce testimony from your professional brethren as to your character and conduct in the interval.

The Council proceeded to the consideration of the case of James Andrew Baird Thompson, registered as of 37, Bolina Road, South Bermondsey, London, S.E., M.B., C.M. 1877, M.D. 1879, U.Glasg., who had been summoned to appear before the Council on the following charge :—

"That being a registered medical practitioner you

abused your position by committing adultery with a Mrs. Grigson, whom and whose husband and child you had attended professionally, which adultery you were found to have committed by the verdict of a jury given at the trial of the case of Grigson *v.* Grigson and Thompson in the Probate, Divorce and Admiralty Division (Divorce) of the High Court of Justice, on October 20th, 1915, and in which the decree was made absolute on May 8th, 1916.

"And that in relation thereto you have been guilty of infamous conduct in a professional respect."

Dr. Thompson was present in answer to his notice; he was not accompanied by counsel or solicitor.

The Acting Registrar having read the notice, the Council's solicitor, in the absence of a complainant, placed the facts before the Council.

He read the decree *nisi* and the decree absolute, certified copies of which he put in. He read a passage from a letter of a solicitor who had been acting for Dr. Thompson, and asked if the latter still adhered to the same line of defence, viz., that at the time of the adultery professional relations did not exist.

Dr. Thompson replied that he did adhere to this defence, and that he denied adultery prior to September 10th, 1913, on which date and on September 13th he admitted that misconduct had taken place.

The Council's solicitor then read extracts from the shorthand writers' notes of the proceedings in the Divorce Court.

Dr. Thompson called Mrs. M. E. Grigson, and examined her as a witness. During the examination of the witness, 6 o'clock approached, and the hearing was adjourned to the next day.

It was then agreed that the nominations of the Branch Councils for the various committees be adopted :—

EXAMINATION COMMITTEE.

The following members had been nominated by :—

The English Branch Council : Dr. Taylor, Dr. Saundby, Dr. Caton.

The Scottish Branch Council : Dr. Russell, Dr. Knox, Dr. Norman Walker.

The Irish Branch Council : Sir John Moore, Sir Arthur Chance, Dr. Kidd.

EDUCATION COMMITTEE.

The following members had been nominated by :—

The English Branch Council : Dr. Norman Moore, Sir G. Philipson, Sir Francis Champneys.

The Scottish Branch Council : Dr. Mackay, Mr. Hodsdon, Dr. Knox.

The Irish Branch Council : Sir Arthur Chance, Sir Bertram Windle, Dr. Little.

PUBLIC HEALTH COMMITTEE.

The following members had been nominated by :—

The English Branch Council : Dr. Newsholme, Dr. Latimer, Mr. Verrall.

The Scottish Branch Council : Mr. Littlejohn, Dr. Cash, Dr. McVail.

The Irish Branch Council : Sir John Moore, Dr. Magennis, Dr. Kidd.

The Council then adjourned.

FOURTH DAY, FRIDAY, MAY 26TH, 1916.

The President, Sir DONALD MACALISTER, in the Chair.

The minutes of the last meeting were taken as read, and confirmed.

The Council resumed the consideration, adjourned from Thursday, May 25th, 1916, of the case of James Andrew Baird Thompson, registered as of 37 Bolina Road, South Bermondsey, London, S.E., M.B., C.M. 1877, M.D. 1879, U.Glasg.

Dr. Thompson resumed his examination in chief of Mrs. M. E. Grigson, and put in a letter which had been written on May 24th, 1916, to her by her husband with reference to her return to him.

Mrs. Grigson was cross-examined by the Council's solicitor, and answered questions put to her from the Chair, and by a member through the Chair, and was re-examined by Dr. Thompson. She also answered questions put to her by the Legal Assessor.

Dr. Thompson then gave evidence on his own behalf. He was cross-examined by the Council's solicitor, and answered questions put to him through the Chair.

Dr. Thompson addressed the Council on his own behalf, and put in certain letters and testimonials.

The Council's solicitor briefly replied. This closed the case.

Strangers having been re-admitted after the Council had deliberated *in camerâ,* the PRESIDENT announced its judgment as follows :—

Dr. Thompson : I have to inform you that the Council have judged you to have been guilty of infamous conduct in a professional respect, and have directed the Registrar to erase your name from the *Medical Register.*

The Council proceeded to the consideration of the case of William Joseph Ryan, registered as care of the British Medical Association, 429 Strand, W.C., L.R.C.P.Edin. 1888, L.R.C.S.Edin. 1888, L.F.P.S. Glasg. 1888, who had been summoned to appear before the Council on the following charge :—

"That being a registered medical practitioner you were convicted of the following misdemeanours, viz. :—

"(1) On February 27th, 1914, at the Lambeth Police Court of being drunk and incapable, and fined 3s.

"(2) On April 23rd, 1914, at the Tower Bridge Police Court of being drunk and disorderly, and directed to pay the costs—viz., the doctor's fee of 7s. 6d.

"(3) On April 7th, 1915, at the Tower Bridge Police Court of being drunk and disorderly, and fined 5s. or five days.

"(4) On February 22nd, 1916, at the Bow Street Police Court of being drunk and incapable, and fined 10s."

Mr. Ryan was not present in answer to his notice, nor was he represented by counsel or solicitor.

The Acting Registrar having read the notice, the Council's solicitor, in the absence of a complainant, laid the facts before the Council. He proved the service of the notice by registered post, but could not prove that the notice had been received. The Council's solicitor read the certificates of conviction which he put in.

Strangers, by direction from the Chair, withdrew, in order that the Council might *in camerâ* consider a point of procedure.

Strangers having been re-admitted, the Council's solicitor read correspondence which had passed between Mr. Ryan and the Registrar and Acting Registrar in regard to his convictions.

This closed the case.

Strangers having been re-admitted after the Council had deliberated *in camerâ,* the PRESIDENT announced its judgment as follows :—

I have to announce that William Joseph Ryan having been proved to have been convicted of the misdemeanours alleged against him in the notice of inquiry, the Registrar has been directed to erase his name from the *Medical Register.*

The Council proceeded to the consideration of the charge against William Bonallo, in regard to whom the Dental Committee had found the following facts :—

"The said William Bonallo was registered in the *Dentists' Register* on December 31st, 1878, as 'in practice on July 22nd, 1878,' and his address in the *Register* for the current year is Cramlington Hall, Cramlington, Northumberland.

"The said William Bonallo did not attend. Service of the notice of inquiry was proved by the solicitor."

The Committee find that the following facts were established by the evidence :—

"That on November 2nd, 1915, the said William Bonallo was convicted at the Northumberland Assizes of feloniously using a certain instrument with intent

to procure miscarriage, and was sentenced to three years' penal servitude.

"The evidence before the Committee consisted of the certified copy of the said conviction and the *Newcastle Daily Chronicle* of November 4th, 1915."

Mr. Bonallo did not attend in answer to his notice, nor was he represented by counsel or solicitor.

The Acting Registrar read the report.

The Council then deliberated on the case *in camerâ*.

Strangers having been re-admitted, the PRESIDENT announced its judgment as follows :—

I have to announce that William Bonallo having been proved to have been guilty of the felony alleged against him in the notice of inquiry the Council has directed the Registrar to erase his name from the *Dentists' Register*.

The Council arranged to meet at 11 a.m. next day (Saturday), to adjourn at 1 p.m., and to resume at 2 p.m., rising at 4 p.m.

The Council then adjourned.

FIFTH DAY, SATURDAY, MAY 27TH, 1916.

The President, Sir DONALD MACALISTER, in the Chair.

The Council considered the case of John Thomas Dickie, registered as of 37 Lauriston Place, Edinburgh, L.R.C.P.Edin. 1881, L.R.C.S.Edin. 1881, who had been summoned to appear before the Council on Wednesday, May 24th, 1916, at 3 pm., on the following charge :—

"That being a registered medical practitioner you were on May 4th, 1916, convicted in the High Court of Justiciary on two separate charges of culpable homicide by using instruments in the bodies of each of two pregnant women and causing them to abort, and were sentenced to five years' penal servitude."

The conviction having been proved it was ordered that the name of John Thomas Dickie be erased from the *Medical Register*.

Motion by Sir FRANCIS CHAMPNEYS, seconded by Mr. PYE-SMITH :—

"That it be remitted to the President, in consultation with the Legal Advisers of the Council, to draw up, for submission to the Council, a warning notice with regard to the 'covering' by medical practitioners of uncertified women practising as midwives."

A discussion followed, in which Dr. NEWSHOLME, Sir H. MORRIS, Drs. TAYLOR and NORMAN WALKER, Sir JOHN MOORE, the PRESIDENT and Dr. LANGLEY BROWNE took part, an important point, *inter alia*, brought forward being that many practitioners do not understand the meaning of covering in these cases; the position of midwives in Ireland and in Scotland being also discussed. Sir FRANCIS CHAMPNEYS having answered and pointed out that most probably the unqualified women tend to propagate puerperal fever, the motion was carried.

The report from the Finance Committee was next received, entered on the minutes and approved. Proposed by Mr. TOMES, seconded by Sir H. MORRIS.

The Council then went into *camerâ* to consider a recommendation by the Finance Committee; also to receive and report from the Emergency Committee.

The report of the Education Committee was, on the proposition of Dr. MACKAY, received and entered on the minutes, and after a short discussion adopted. The report was as follows :—

On November 4th, 1915, the following resolution was adopted by the General Medical Council :—

"That it be remitted to the Education Committee, with the addition for this purpose of Dr. McVail and Dr. Newsholme, to report to the next meeting of Council on the education of medical students in the ethical relationships of medical practitioners to the State, to their patients and to each other, and that the Committee have power to make such inquiries on the subject as it deems advisable."

A letter addressed by the Acting Registrar to all the teaching bodies elicited the information that in most cases the subject is dealt with as part of the regular work in the courses of forensic medicine and public health, to some extent also in other classes, and occasionally in special lectures. In a number of instances, however, no regular instruction has hitherto been given.

The Committee are of opinion that it is advisable that the subject should not be neglected in the education of the medical student; but they recognise that the special arrangements adopted for conveying the instruction may naturally vary among the different bodies. They propose, therefore, that a general recommendation dealing with the teaching of medical ethics be added to the resolution of the General Medical Council in regard to professional education as adopted on June 6th, 1912 (Minutes, Vol. XLIX., pp. 81 and 300), as follows, viz. :—"Instruction should be given, in the courses of Forensic Medicine and Public Health, or otherwise, on the duties which devolve upon practitioners in their relationship to the State, and upon the generally recognised rules of medical ethics. Attention should be called to all explanatory notices on these subjects issued by the General Medical Council."

The report from the Dental Education and Examination Committee was received and entered on the minutes, and after being discussed was approved, proposed by Mr. TOMES, seconded by Sir H. MORRIS.

The Committee had received a report from the University of St. Andrews for the recognition of a dental diploma, which recognition the Committee recommended. An application had been received from Mr. H. H. Elkam, now working as a dental surgeon at 15th General Hospital, Alexandria, for registration on the *Dentists' Register*. He possesses the licence of the Dental Board of Adelaide. The Council agreed that this should be granted.—The report dealt with the question of modifications in the curriculum, such as bringing it down to four years; also with expense, some members asserting that the dental curriculum cost more than the medical. The Committee in the report stated that they agreed in attributing any shortage there may be mainly to the inadequacy of the Dentists Act, also in considering that the preliminary examination should be the same for dental as well as for medical students. With regard to the best method for protecting the public from being deceived by unqualified persons, the Committee regret in their report that they do not see any means which the Council could adopt short of attempting to procure an amendment of the Dentists Act. A motion was therefore proposed to the Council "That the Lord President be informed of the urgent necessity of the public being able to distinguish between qualified and unqualified dentists." This motion was carried *nem. con.*

The report from the Examination Committee in regard to various matters relating to the Apothecaries' Hall, Dublin, and to the Assistant Surgeon Branch of the Indian Medical Service was approved.

The following report from the Public Health Committee was received and entered on the minutes, proposed by Sir JOHN MOORE, seconded by Dr. LATIMER :—"The Public Health Committee report that at their meeting on Tuesday, May 23rd, 1916, the replies of the licensing bodies to a circular letter calling their attention to the figures in the statistical table presented to the Council by the Committee on November 4th, 1915, was considered, and that it was resolved to report to the Council that the further consideration of the statistics relating to the examinations for qualifications in Public Health would be deferred until the next session of the Council."

The report from the Pharmacopœia Committee was received, entered on the minutes, and approved.

The report from the Students' Registration Committee was also received, entered on the minutes, and approved.

Mr. King was re-elected General Registrar.

On the proposition of Dr. NORMAN MOORE, a vote of thanks to the Chairman was carried by acclamation.

The Council then rose.

A BED has been endowed at the Ilford Emergency Hospital with £750 collected among passengers who escaped injury in the railway collision at Ilford on New Year's Day of last year.

THE KING'S BIRTHDAY HONOURS.

The list of honours conferred by the King on the occasion of His Majesty's birthday includes the following :—

Privy Councillor.—Christopher Addison, Esq., M.P., M.D.

Knights.—Francis Mark Farmer, Esq., Armand Marc Ruffer, Esq M.D., Professor Nestor Tirard, M.D.

K.C.M.G.—Walter Baldwin Spencer, Esq., C.M.G., Professor of Biology, University of Melbourne, and Director of the National Museum of Natural History, Geology, and Ethnology, Melbourne.

C.M.G.—Frederick Montizambert, Esq., M.D., I.S.O., Director-General of Public Health, Canada.

C.I.E.—Major Frederick Norman White, M.D., Indian Medical Service, Assistant Director-General, Indian Medical Service (Sanitary).

C.I.E. (additional) for meritorious service in connection with the war.—Captain Alexander Gillilan Johnson MacIlwaine, Royal Army Medical Corps, Embarkation Medical Officer, Bombay.

Kaisar-I-Hind Gold Medal.—Henry Martyn Newton, Esq., F.R.C.S., of the Church of Scotland Mission at Jalalpur Jatan, in the Gujrat District, Punjab; Robert George Robson, Esq., M.A., M.D., C.M., Chairman of the Municipal Committee of Ajmer; the Rev. Peter Cullen, M.D., Brigade-Surg. Lieut.-Colonel, Indian Medical Service (retired), of Jubbulpore, Central Provinces.

Order of the Bath.—To be Additional Member of the Military Division of the Third Class, or Companions, of the said Most Honourable Order : Fleet Surgeon Ernest Courtney Lomas, D.S.O., M.B., F.R.C.S.Ed., R.N. To be Additional Member of the Civil Division of the Third Class, or Companions, of the said Most Honourable Order : Surg.-General John Jeffreys Dennis, M.D., R.N.; Col. Alfred Percy Blenkinsop, Assistant Director-General, Army Medical Service; Major Percy Samuel Lelean, Royal Army Medical Corps, Assistant Professor, Royal Army Medical College.

Royal Victorian Order.—To be Members of the Fourth Class : Noel Dean Bardswell, Esq., M.D., Medical Superintendent, King Edward VII.'s Sanatorium, Midhurst, Sussex; Frederick Stanley Hewett, Esq., M.D., Surgeon-Apothecary to His Majesty the King.

MEDICAL AWARDS FOR BRAVERY.

A supplement to the *London Gazette*, published on May 30th, contains the following awards :—

D.S.O.

His Majesty the King has been graciously pleased to approve of the appointment of the undermentioned officer to be Companion of the Distinguished Service Order in recognition of his gallantry and devotion to duty on the field :—

Temp. Capt. Thomas Lewis Ingram, R.A.M.C. (attached 1st Bn. Shrops. L.I.), for conspicuous gallantry and devotion to duty. He collected and attended to the wounded under very heavy fire, and set a splendid example. Since the commencement of the war he has been conspicuous on all occasions for his personal bravery.

Military Cross.

His Majesty the King has been graciously pleased to confer the Military Cross on the undermentioned officers, in recognition of their gallantry and devotion to duty in the field :—

Capt. James Couper Brash, M.B., 10th Fd. Amb., R.A.M.C. (Spec. Res.), for conspicuous gallantry and devotion to duty. He went to an artillery dug-out which had received a direct hit, and, assisted by two men, extracted the wounded and administered first aid under heavy shell fire.

Capt. Henry Percival Hart, M.B., R.A.M.C., for conspicuous gallantry and devotion to duty when, although himself wounded, he went out, dressed, and brought into safety the wounded under heavy shell fire.

Temp. Capt. Philip Randal Woodhouse, M.B., R.A.M.C. (attd. 1st. Bn. I. Gds.), for conspicuous gallanty and devotion to duty. He tended the wounded under heavy shell fire, and, though himself wounded, continued his work. On another occasion he went across the open under shell fire to attend to the wounded.

Temp. Lieut. William John Knight, M.D., 73rd Fd. Amb., R.A.M.C., for conspicuous gallantry and devotion to duty when in charge of an advanced dressing station under heavy shell fire. He continued to attend the wounded with great coolness.

SIR DOUGLAS HAIG AND THE MEDICAL SERVICES.

The recently published dispatch of the British Commander on the Western Front contains the following :—

The Medical Services.

All branches of the Medical Services deserve the highest commendation for the successful work done by them, both at the Front and on the Lines of Communication. The sick rate has been consistently low; there has been no serious epidemic, and enteric fever, the bane of armies in the past, has almost completely disappeared owing to preventive measures energetically carried out. The results of exposure incidental to trench warfare during the winter months were to a very great extent kept in check by careful application of the precautions recommended and taught by regimental medical officers. The wounded have been promptly and efficiently dealt with, and their evacuation to the base has been rapidly accomplished. The close co-operation which has existed between the officers of the Regular Medical Service of the Army and those members of the civil medical profession who have patriotically given their vauable services to the Army has largely contributed to the prevention of disease and to the successful treatment and comfort of the sick and wounded. As part of the Medical Services, the Canadian Army Medical Corps has displayed marked efficiency and devotion to duty.

The valuable nature of the work performed by the officers of the Central Laboratory and the Chemical Advisers with the Armies in investigations into the nature of the gases and other new substances used in hostile attacks, and in devising and perfecting means of protecting our troops against them, is deserving of recognition. The efforts of these officers materially contributed to the failure of the Germans in their attack of December 19th, 1915, as well as in the various gas attacks since made.

MENTIONED IN DESPATCHES.

The War Office has just issued the dispatches from General Barnardiston on the operations of the Tsingtau Expeditionary Force in September, October, and November, 1914. Among the officers specially mentioned are :—Major J. A. Hartigan, M.B., R.A.M.C., Senior Medical Officer, General Staff; Capt. G. H. Dive, R.A.M.C., attd. 2nd South Wales Borderers.

THE CAMEROON CAMPAIGN.

The dispatches of the above campaign have just been published. The following officers are mentioned for distinguished and meritorious service by

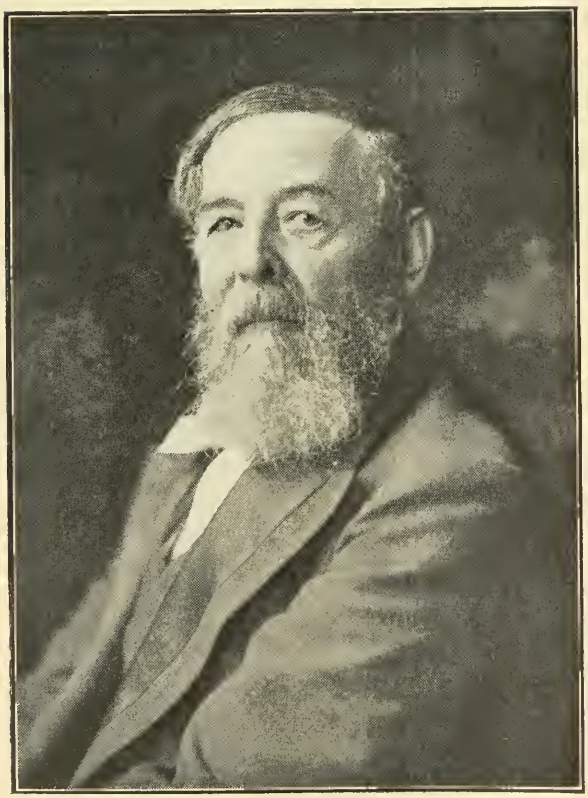
Sir Charles Dobell :—Major E. B. Booth, D.S.O., Royal Army Medical Corps; Temp. Capt. T. M. R. Leonard, West African Medical Staff; Lieut.-Col. J. C. B. Statham, C.M.G., Royal Army Medical Corps.

The following officers are mentioned for distinguished and meritorious service by General Cunliffe :—West African Frontier Force (Nigeria Regt.). Dr. J. C. M. Bailey, West African Medical Staff; Dr. W. S. Clark, West African Medical Staff; Dr. W. E. S. Digby, West African Medical Staff; Dr. W. H. Peacock, West African Medical Staff; Dr. T. H. Suffern, West African Medical Staff; Dr. C. E. S. Watson, West African Medical Staff; Dr. R. F. Williams, West African Medical Staff.

OBITUARY.

SIR JAMES FREDERIC GOODHART, M.D., LL.D., F.R.C.P., LONDON.

WE regret to record the death of Sir James Frederic Goodhart, which took place at his residence in Portland Place, W., on Sunday, May 28th. He was in his 71st year. Goodhart received his medical training at Guy's Hospital, and after taking the qualification of the English Colleges, graduated M.B., C.M. of Aberdeen University in 1871 proceeding to the M.D. degree two years later. In 1899 his old University conferred on him the honorary LL.D. degree. In 1880 he became F.R.C.P.Lond. He was Pathologist at Guy's Hospital in 1875, and two years later was



appointed Assistant Physician. He also joined the staff of the Evelina Hospital for Children. Goodhart soon attained to a prominent position in the medical world, and for many years enjoyed a large consulting practice. Although recognised as an authority on diseases of children, his work was by no means specialised, but ranged over a wide field. His pathological work on the liver and spleen is well known, and he also wrote with distinction on respiratory and renal disorders.

His Harveian Lectures on Common Neuroses, which were published in book form, have already been referred to in our columns. With Dr. G. F. Still he wrote "Diseases of Children," a book which, now in its tenth edition, is a standard work. He also contributed the articles on Influenza and Asthma in Allbutt and Rolleston's "System of Medicine." Goodhart became Consulting Physician to Guy's Hospital in 1899, and in 1911 he was created a baronet. Lady Goodhart died in 1915, leaving two sons, the elder Mr. Ernest F. Goodhart, who succeeds to the title, being honorary secretary to Princess Mary's Soldiers' and Sailors' Fund.

DR. JOHN HAROLD, M.B., M.R.C.S., L.R.C.P., LONDON.

DR. JOHN HAROLD died at his residence, 65, Harley Street, London, on May 27th, after a long illness. He was born in Dublin, and was educated at Belvedere College, Dublin, University College, London, and at Charing Cross Hospital, being admitted a member of the Royal College of Surgeons, England, and licentiate of the Royal College of Physicians, London, in 1889, and taking the M.B., B.Ch., and B.A.O. degrees at the Royal University of Ireland, in 1901. Dr. Harold, who had held various positions at Charing Cross Hospital and its medical school, including that of medical registrar at the Hospital, was physician to the St. John and St. Elizabeth Hospital, St. John's Wood, and medical referee to the London Cremation Company. He was senior assistant editor of "Quain's Dictionary of Medicine," for which he wrote many articles, and advisory editor of "The International Clinics."

CHARLES EDWARD FITZGERALD, M.D.DUB.

Hon. Surgeon-Oculist to the King in Ireland; Ex-President of the Royal College of Physicians of Ireland.

IT is with great regret we record the death of Dr. Charles E. FitzGerald, for many years one of the leading ophthalmic surgeons in Dublin, and recently President of the Royal College of Physicians of Ireland. He died on May 27th, after a surgical operation, at the age of 73.

FitzGerald was the only surviving son of the late Baron FitzGerald, a distinguish Irish judge, who resigned his seat on the Bench in 1882, because he regarded the duties imposed upon the judges by the Crimes Act, then passed, as unconstitutional. He was born in Dublin, and educated at Trinity College, where he took his B.A. degree in 1864, and his medical degrees in 1868. He subsequently took the M.D. degree in 1874, and he became a Fellow of the Royal College of Physicians in 1886. After qualification he studied ophthalmology in Paris, and soon after his return to Dublin he was, in 1873, appointed Ophthalmic and Aural Surgeon to the House of Industry Hospitals. He subsequently became Surgeon to the National Eye and Ear Infirmary, but, on its amalgamation with St. Mark's Ophthalmic Hospital to form the Royal Victoria Eye and Ear Hospital, he retired from active hospital work. His withdrawal was due to the difficulty of transferring to the new institution the entire staffs of the two hospitals it replaced. FitzGerald, although the Senior Ophthalmic Surgeon in Dublin, and engaged in active practice, generously gave up his place to younger men. He was for some time Lecturer on Ophthalmic Surgery in the Carmichael School of Medicine, and afterwards Professor of the same subject in the Royal College of Surgeons.

Early in his career FitzGerald gained a large practice, and he remained in busy practice to the week of his death. He wrote little in recent years, and devoted his leisure time to music and art. A man of retiring habits, he never sought publicity, but when the post of President of the Royal College of Physicians was offered to him in 1912, he performed its duties, public and private, with great dignity and efficiency. Of marked individuality, as shown by his face, his dress, and a touch of brogue, he was devoid of any trace of pomposity or affectation. He gained the goodwill of all by his genial comradeship, his kindliness

and his transparent honesty. He spared no efforts to perform all the duties of President of the College and to make himself conversant with the details of College business, which must often have been, to a man of his tastes and pursuits, in themselves dull and repellent. On the termination of his office he presented to the College a handsome badge of office to be worn by subsequent Presidents.

"Whom the gods love die young." Charles Fitz-Gerald, though past three score years and ten, was surely loved by the gods, for he was still young. Age had no doubt mellowed him, but he had still the joy and the freshness of youth. His friends, while they miss him and regret his death, had not the unhappiness of seeing him grow old and fail in bodily and mental powers, and they are glad that he was spared the misery of a long or painful illness.

DR. HUGH WHITE, M.B., Ch.B., DEVONPORT.

The death has taken place at Devonport of Dr. Hugh White, a well-known local medical practitioner. The deceased gentleman was a native of Dreghorn, Ayrshire. He received his medical training at Glasgow University, graduating M.B., Ch.B., in 1909. After occupying several medical positions, he was appointed surgeon at the Devonport Royal Albert Hospital. Subsequently he commenced private practice at Devonport, and enjoyed a wide popularity.

REVIEWS OF BOOKS.

SURGERY IN WAR. (*a*)

Of the making of books there is no end. We have already a large number of volumes on subjects connected with the world war, and now the surgical side of the conflict comes under review.

Major Hull's work, "Surgery in War," is a praiseworthy effort, in Sir Alfred Keogh's words, "to take stock, as it were, of the surgical position, to apportion values to various methods of treatment, and to obtain some appreciation of their results." Major Hull has had the advantage of assistance from several brother officers with experience in France. Lieut.-Col. Harrison deals with the bacteriology of wounds, and it must be remembered that the last war experience of the R.A.M.C., viz., in the South African Campaign, was not a suitable training for work in a country of flooded trenches and a soil riddled with pathogenic organisms. Appreciative reference is made to the work of Sir A. E. Wright.

Lieut. W. A. Edwards writes, with accurate knowledge, an excellent description of the methods of localising foreign bodies by X-rays. It is suggested that early operation should be performed in abdominal injuries, and Mayo Robson's excellent results are cited.

The book should be of great value to all surgeons employed in the treatment of wounded.

TWILIGHT SLEEP. (*b*)

It was a relief when we took up "Twilight Sleep," and found that it was written by a medical man. The superabundance of literature on this subject in the lay periodicals by lay authors has been sufficient to prejudice it in the eyes of the profession. Scopolamine-morphine anæsthesia has in Dr. Hellman a staunch supporter, although he fully realises its disabilities. Those who have employed the treatment in hospital are more firm supporters than those who have used it only in private practice. The amount of time necessary for its careful administration is well-nigh a definite contra-indication in the practice of the busy accoucheur, though if it were possible to equip private hospitals with nurses specially trained in the subject, the treatment could be used more generally. If Dr. Hellman had called his work a bibliography of scopolamine-morphine anæsthesia, with a note on its administration, the title would not have been miscalled. The bibliography is excellent; the remarks are valuable and deal with the subject from all points of view.

WHEELER'S HANDBOOK OF MEDICINE. (*a*)

Wheeler's Handbook of Medicine needs no introduction, for it has attained much popularity both among students and practitioners, and the appearance of a fifth edition indicates that it is still to the fore. Since the issue of the last edition four years ago, the chief advances in our knowledge of disease have been in connection with cardiac diseases, and in consequence the section dealing with these affections has been considerably enlarged. All the other sections have however, been thoroughly revised and brought up to date, and the paragraphs dealing with treatment have in many instances been amplified with a view both to including newer methods and to describing the older ones with somewhat more detail. We think the author of this edition might with advantage have devoted fuller consideration to some of the therapeutic sections. The original object of the book, namely, the correlation of symptoms with the facts of anatomy and physiology, in a volume which does not by its size preclude the possibility of its being used as a companion in the clinical study of disease, has not been lost sight of, and Dr. Jack has well maintained this aim in his critical revision of the work. We note that the older names have been employed in anatomical references, and we venture to suggest that in future editions it would be well to include also the newer nomenclature if the book is to remain popular with students.

The book is clearly and succinctly written, and will be found a trustworthy guide to diagnosis and treatment. It takes a deservedly high place among the smaller text-books on medicine, and, in addition to assisting students in their revision of work for examination purposes, it should prove of much value to the general practitioner in his daily routine. The printing and binding reflect great credit on the publishers, who should participate in the well-merited success the volume is sure to score in the future as in the past.

(*a*) "Surgery in War." By A. J. Hull, F.R.C.S., Major R.A.M.C.; with a Preface by Sir Alfred Keogh, K.C.B., M.D. Cr. 8vo, pp. 404; 24 plates, 55 figures. London: J. and A. Churchill. 1916. 10s. 6d. net.

(*b*) "Amnesia and Analgesia in Parturition (Twilight Sleep). By Alfred M. Hellman, M.D. (London: H. K. Lewis and Co. 1915. Pp. 197. 8vo.)

(*a*) "Wheeler's Handbook of Medicine." By William R. Jack B.Sc., M.D., F.R.F.P.S., Physician to the Glasgow Royal Infirmary, Lecturer in Clinical Medicine in the University, Glasgow. (Edinburgh E. and S. Livingstone. Fifth Edition. 1916. Price 8s. net.).

MEDICAL NEWS IN BRIEF.

Birmingham Skin Hospital.

In the thirty-fifth annual report of the Birmingham and Midland Skin Hospital, it is stated that the increase in the number of in-patients was 29, and in the number of out-patients 394, making the total of patients treated 6,788. This increase has necessarily occasioned a great amount of extra work by the honorary surgeons, further intensified by the inability—by reason of the war—to relieve the strain by obtaining the help of qualified clinical assistants. The ordinary income of the past year was £3,435, as compared with £3,227 income of the previous year—an increase of £208, mainly due to the majority of the patients of the working class dwelling in army munitions areas being in receipt of higher wages and so better able to pay for the benefits they receive. On the other hand, the events which have influenced greater income have also brought about greater annual expenditure, by the general rise in price, not only of everyday commodities, but also to a serious extent in surgical and medical requisites of all kinds and scientific apparatus indispensable to the special work of the hospital, a combination of causes occasioning an increase in expenditure over income of £208. The increase in expenditure over that of 1914 is £660.

An appeal is made for donations and subscriptions to the radium fund, which is in urgent need of

replenishment, and it is recorded that the electrical and bacteriological departments have now arrived at a stage when they could together exist as an independent unit, and with extended accommodation, additional radium, and under the title of the "Birmingham and Midland Radium Institute," they might confidently expect a much wider sphere of usefulness than is possible so long as they confine their attention to skin diseases only.

Queen's Hospital for Children.

AT the annual meeting, on June 1st, of the Governors of the Queen's Hospital for Children, Bethnal Green, Colonel Lord William Cecil, who presided, in proposing the adoption of the report, referred to the great increase in the work which had taken place last year. The in-patients had numbered 2,029, as against 1,736 in 1914, and there had been 42,225 out-patients with nearly 150,000 attendances. The hospital was doing an important national work in conserving child life, and deserved the support of all who had the future welfare of the country at heart. To carry on the work an income of about £16,000 was required annually, and the Committee had to rely upon the benevolent public for nearly the whole of this sum.

Maternity and Child Welfare.

THE Royal Sanitary Institute are offering a prize of £50 and the medal of the Institute for the best thesis, setting out a complete and practical scheme for maternity and child welfare work, suitable for adoption by local authorities. Ante-natal care and the means of exercising it, child welfare from birth to school age, formation and functions of clinics or other suitable institutions, control in the home, home and institutional instruction and treatment, the utilisation of existing organisations or agencies, and the qualifications and payment of officers and workers are among the points that should be dealt with.

Steel Helmets and Head Wounds.

IN the House of Commons on May 29th, Mr. Tennant, replying to Mr. Bryce, who asked whether steel helmets had now been provided for all the troops on the Western front; and, if not, whether instructions would be given that when troops leave the trenches they should leave the helmets for the incoming troops, said:—The supply of steel helmets has very nearly reached the number asked for up to the present, and it is believed that sufficient have been issued for the needs of all the British troops within the zone of shell fire in France. As regards the latter part of the question, I think we may safely leave the issue of any such instructions to the General Officer Commanding-in-Chief, in whom we all have the highest confidence, rather than attempt to dictate to him from this House on matters obviously within his purview. Mr. Bryce also asked to what extent the use of these helmets had diminished the percentage of head wounds, which, about six months ago, were 15 per cent., and Mr. Tennant said:—The percentage of head wounds to total wounds in British hospitals in France from February 18th to April 5th is 12.35 per cent.

Swiss Medical Mission.

THE Swiss Medical Mission now in this country to select wounded German prisoners to be exchanged for our own incapacitated soldiers in Germany were entertained at dinner by the City Swiss Club on June 1st. M. Charles Barbezat, chairman of the club, presided, supported by M. Carlin, the Swiss Minister, and the principal members of the Swiss colony in London.

M. Carlin expressed his keen appreciation of the articles which had appeared in the English Press during the last few days, paying tribute to the humanitarian qualities of his country as evinced in the treatment of the British wounded just arrived in Switzerland. Of all the neutral countries, Switzerland had, he thought, suffered most; surrounded by the belligerents, and without any access to the sea, her position was unique in its difficulties, for *per capita* the external trade of Switzerland was the greatest in the world. They were doing their best to alleviate the sufferings of the wounded of all the belligerents.

The Chief of the Mission, Lieut.-Colonel Sturzenegger, replying to the toast of the "Mission Médicale Suisse," said he had found the German prisoners, particularly the wounded, treated with the greatest possible consideration. In the good air of Switzerland they would gain from 2 lb. to 6 lb. in weight in a week.

Lieut.-Colonel Bray, the English medical officer accompanying the mission, replying later, bore testimony to the good work performed by it, but, amid great laughter, said it would be quite impossible for the German wounded who left England for Switzerland to increase in weight there or elsewhere, they were so well-fed here.

London Street Watering.

MR. Hayes Fisher informed Sir S. Collins (R., Kennington), in the House of Commons on May 30th, that the President of the Local Government Board had not, after inquiry, learned that any Metropolitan Borough Council had discontinued street watering. In some cases street watering had been reduced for reasons of economy, and in more cases still owing to the difficulty in getting labour. It was the policy of the Local Government Board that there must be no reductions which would create any serious risk to health.

Oxford University.

THE Judges appointed by the Trustees of the Rolleston Memorial Prize have reported to the Vice-Chancellor that they have awarded the Prize to Edgar Douglas Adrian, M.A., M.B., Fellow of Trinity College, Cambridge, and they are of opinion that the papers submitted by George Matthai, B.A., Emmanuel College, Cambridge, are of a high standard of merit.

Nurses' Insurance Society.

AT the fourth annual general meeting of the Nurses' Insurance Society on May 30th Mr. Thomas C. Dewey, who presided, stated that during the twelve months under review sickness and disablement benefit amounting to £16,838 had been distributed among the members, as compared with £17,756 in the previous year.

Smallpox Imported from Belgium.

AT a meeting of the Bethnal Green Guardians, on May 23rd, Mr. Eickhoff, as the Board's representative on the Metropolitan Asylums Board, stated that for the two weeks ending Sunday there had been admitted to the fever hospitals from Bethnal Green 14 cases of scarlet fever, 15 of diphtheria, six of whooping cough, and one case of measles—a total of 36 as compared with 26 for the previous fortnight. He had reported a fortnight ago that there was a case of smallpox removed from Earl's Court, and he had now to state that it had been transferred to Joyce Green.

Mr. Davies: Is it a vaccinated case?

Mr. Eickhoff: I don't know. It comes from Belgium.

Care of Child Life.

IN support of the Royal Free Hospital's urgent appeal for "The Country's Charge"—the saving of the children—a Mansion House meeting has been held by the kind permission of the Lord Mayor, who presided.

In explaining the object of the meeting Sir Charles Wakefield said the hospital was established in 1828. The sick poor could find immediate shelter and relief without any letter of recommendation. There were now 165 beds, and over 2,000 in-patients and 40,000 out-patients were annually benefited. An urgent appeal was now being made for £200,000 to enable the hospital to extend further its work for the children of the nation, and to take steps to prevent the present lamentable waste of infant life. It was the duty of the country to do all in its power to preserve infant life. It was estimated that, if it had been possible forty years ago to provide the measures by which numbers of mothers and babies had benefited

at the Royal Free Hospital, we should now have over a million more men to safeguard our country. Their Majesties the Queen and Queen Alexandra had graciously accepted a reproduction of the picture which had been adopted as the badge of the hospital's appeal.

Dr. Jane Walker said a generous donor had given a piece of land valued at £30,000 adjacent to the hospital in the Gray's Inn Road, upwards of an acre in extent. One of the departments it was proposed to erect on this land was one for the treatment of tuberculosis.

It was stated that £5,000 had been received to date in response to the appeal.

Derby's Mental Hospital.

WITH 85 additional patients received from institutions now occupied by wounded soldiers and the staff reduced by ten since a year ago, the committee of the Derby Mental Hospital appealed to the local Military Tribunal on May 24th for the exemption of four employees. These were a farm labourer, a farm carter, a joiner and an assistant engineer, all married, but not included in the exemption arrangements made by the Board of Control.

The medical superintendent (Dr. S. R. Macphail) stated that 60 per cent. of the eligible staff enlisted at the outbreak of the war, and altogether 40 per cent. of the whole staff had joined the forces. The four in question were the only men of military age left, and they acted as attendants and could not be dispensed with. In fact, in his opinion, the limit of reduction consistent with public safety had been passed. The only way to decrease the number of patients was to allow them to escape. (Laughter.) There were few escapes in normal times, but during the past month three patients had got away, one being still at large.

Conditional exemption was granted in respect of all four of the men.

Radium and Plant Life: Result of Mr. Sutton's Experiments.

THE experiments with radio-active ores and residues as stimulants to plant growth carried out on his firm's trial grounds at Reading by Mr. Martin H. F. Sutton, did not, according to his report of the second series of experiments just published, confirm the expectations formed in some quarters, but they were none the less instructive and definite.

Mr. Sutton had been led to believe, as others had been, that the residues and ores of radium mines in Cornwall had proved beneficial to plant life, and undertook a series of practical investigations. His experiments were admirably designed to test whatever merits the various commodities might possess. The result is disappointing.

No evidence whatever of beneficial influence of the ores or residues was perceptible in any of the various farm and garden crops used in the experiments. It may be that a better understanding of the precious mineral and the uses to which it can be applied will necessitate a revision of the Reading results; but so far as the present state of knowledge goes Mr. Sutton's conclusions are to the effect that plant life is not consistently or appreciably affected one way or the other by the influence of the radio-active ores and residues operating directly or indirectly upon the plants.

MEDICAL WAR ITEMS.

NEWS has been received of the death in action of Lieut.-Colonel George Oliver Moorhead, eldest son of the late Brigade-Surgeon G. A. Moorhead. Born in Mauritius and educated at Malines, Belgium, and Edinburgh University, he was practising as a doctor in the Transvaal. When the last South African War broke out he was commandeered by the Boers, and placed in charge of a field ambulance. Seizing an opportunity of escaping he joined the British forces, and was given charge of a hospital. He was at Colenso, and took part in other actions, receiving the Queen's and King's medals with clasps. When the present hostilities commenced he abandoned the medical profession for military work, joining the Union Defence Force. Lieut.-Colonel Moorhead, who was formerly in command of the Northern Mounted Rifles, assisted in quelling the South African rebellion and went through the German West African campaign, at the close of which he volunteered for further service. He was 50 years of age. The death of his brother, Brevet Colonel A. H. Moorhead, A.D.M.S., was recorded only two months ago.

Captain GAVIN ALEXANDER ELMSLIE ARGO, M.B., Royal Army Medical Corps, who has been wounded, lived at the Manse, Kincardine-O'Neil, Aberdeenshire, and was educated at Aberdeen University, where he took his medical degree. He has been a captain in the Royal Army Medical Corps since last August.

Lieutenant HARRY JOHN SULLINGS KIMBELL, Royal Army Medical Corps, who died on May 28, was until recently in charge of Preston Hall Hospital, Maidstone. He received his commission as temporary lieutenant in August of last year. Lieutenant Kimbell had his medical education at St. Bartholomew's Hospital, and he was an M.R.C.S. England, and an L.R.C.P. London, 1907.

MRS. HELEN FARNWORTH, of Wolverhampton, left £1,200 among three Wolverhampton hospitals.

Captain REGINALD TAVERNER JOHNSON, of Darlaston, left £1,000 to the North Staffordshire Infirmary.

Miss ANNIE EMILY PITMAN, of Tunbridge Wells, left £1,000 to the Tunbridge Wells General Hospital.

MRS. ANNA CATHERINE BASTARD, of Bracknell, Berks, left £200 to the Taunton and Somerset Hospital.

Mr. MAURICE LINDSEY O'CONNOR MORRIS, of Gortnamona, Tullamore, King's County, left £2,500 to his nurse, Linda Kearns, if in his service at his death.

Sir THOMAS BOOR CROSBY, M.D., F.R.C.S, the first medical man to become Lord Mayor of London, occupying that office 1911-12, left £38,905.

A MOVEMENT is on foot to complete a memorial to the late Dr. Fletcher Little, medical officer of health for Harrow. It will take the form of apparatus for the instruction of blinded soldiers in massage.

MRS. JOSEPHINE RAPHAEL, of Porchester-terrace, W., and Villa Raphael, Cannes, left £100 to the London Homœopathic Hospital, and £300 each to the London Hospital and the Royal Hospital for Incurables at Putney.

THE Metropolitan Convalescent Institution has received £300 from Smith's (Kensington Estate) Charity, £300 from the executors of the late Mrs. Gore Lloyd, and £50 from the Worshipful Company of Grocers.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

LETTERS TO THE EDITOR and Original Papers intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of *bona fides*. These should be addressed to the Editor at the Offices of this Journal; if in Ireland, to the Dublin Office, 29 Nassau Street; from all other parts of the United Kingdom these should be addressed to the London Office, 8 Henrietta Street, Strand.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s., post free at home or abroad.

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ADVERTISEMENTS.

FOR ONE INSERTION:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

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Small announcements of Practices, Assistances, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

AN IRON TONIC!

AT a concert to wounded soldiers at the Kitchener Hospital, Brighton, a young soldier from the Oversea Forces, who had been rendered dumb from shell shock in France, recovered his speech when listening to the humorous song "Any Old Iron." He became excited, and shouted out "Old iron!"

TENAX (Walsall).—You will see he has obtained recognition by reference to the list of birthday honours we publish in this issue.

LUMBAR (Bow, E.).—The condition is probably secondary to the lordosis.

NERVES

AT the Thames Police Court a young man asked Mr. Cancellor to sign a "green" form to enable him to leave the country. He was not in good health, he said.

Mr. Cancellor: From what are you suffering?

Applicant: Nerves.

Mr. Cancellor: Have you a medical certificate?

Applicant: No.

Mr. Cancellor: I shan't sign it.

REFEREE (London, S.W.).—We agree with you regarding the unsatisfactory nature of the procedure, and hope to refer to the subject in detail at an early period.

DR. J. M.—We have written you.

J. DAVIES (Battersea) will receive a private communication after necessary inquiries have been made.

DAYLIGHT SAVING.

AT a meeting of the City of London Guardians on May 30th, it was stated that, as a result of the Summer Time Act, 10,000 ft. of gas and 66 units of electricity were saved at the City of London Military Hospital, Homerton, in the first week.

X. L. (Cheltenham).—There are at least four preparations of British manufacture which are being advertised as substitutes.

PERCUSSION (Birmingham).—A solution of two to four grains to the ounce should give satisfactory results.

SOLON (Brighton).—The condition is one of recurrent melancholia.

Meetings of the Societies, Lectures, &c.

THURSDAY, JUNE 8TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF OBSTETRICS AND GYNÆCOLOGY) (1 Wimpole Street, W.).—8 p.m.: Specimens—Dr. J. D. Malcolm: Strangulation of Fibromyomatous Uterus caused by Torsion of the Corpus Uteri on the Cervix. Dr. F. J. McCann: (1) Case of Pregnancy in a Large Fibromyomatous Uterus; (2) Soft Fibroma of the Paravaginal Connective Tissue. Short Communications—Dr. H. Russell Andrews: (1) Three Cases of Hæmatoma of Abdominal Wall; (2) Case of Primary Abdominal Pregnancy. Paper—Dr. John Phillips: Acute Hepatic Toxæmias complicating Pregnancy and Labour.

BRITISH OTO-LARYNGOLOGICAL SOCIETY (11 Chandos Street, Cavendish Square, W.).—5 p.m.: Meeting.

Vacancies.

Dublin, Temple Street.—Assistant Surgeon. Applications to the Hon. Secretary of Medical Board. (See advt.)

University of Dublin.—Chair of Surgery. Applications to the Registrar of the School of Physics. (See advt.)

Darlington Hospital and Dispensary.—House Surgeon. Salary £160 per annum, with board, residence, laundry, etc. Applications to H. F. Creek, Secretary, 46 Greenbank Road, Darlington.

Royal Berkshire Hospital.—House Physician. Salary £250 per annum, with apartments, board, and washing. Applications to Herman Burney, Secretary, Reading.

Sheffield City Hospital: Infectious Diseases.—Medical Officer. Salary £225 per annum, with board, lodging, and washing. Applications to the Medical Superintendent, Lodge Moor Hospital.

Royal Victoria and West Hants Hospital, Bournemouth.—House Surgeon. Salary £150 per annum and extras, with board, lodging, and washing. Applications to Gordon M. Saul, Secretary.

Hampstead General Hospital, Haverstock Hill, N.W.—Resident House Physician. Salary £200 per annum, with usual allowances. Aplications to the Secretary.

East Sussex Hospital, Hastings.—House Surgeon. Salary £150 per annum, with board and washing. Applications to the Secretary.

Royal Devon and Exeter Hospital.—House Physician. Salary £150 per annum, with board, apartments, and washing. Applications to Samuel S. Cole, Secretary, Exeter.

Manchester Northern Hospital for Women and Children, Park Place, Cheetham Hill Road, Manchester.—Lady House Surgeon. Salary £120 per annum, with apartments and board. Applications to Mr. Hubert Teague, Secretary, 38, Barton Arcade, Manchester.

The Guest Hospital, Dudley.—Assistant House Surgeon. Salary £120 per annum, with board, rooms, attendance and washing. Applications to the Secretary.

The Sheffield Royal Infirmary.—House Physician. Salary £120 per annum, with board and residence Applications to Jno. W. Barnes, Secretary.

North Ormesby Hospital, Middlesbrough.—Assistant House Surgeon. Salary £150 per annum, with board, residence, and washing. Applications to A. Stanley Brunt, Secretary.

Appointments.

ESTERMAN, T., M.B., Ch.B.St.And., House Surgeon at Leicester Royal Infirmary.

HEDDEN, R., L.R.C.P.Lond., M.R.C.S., Certifying Surgeon under the Factory and Workshop Acts for the Honiton District of the county of Devon.

HOLLAND, EARDLEY, M.D.Lond., F.R.C.S.Eng., Assistant Obstetric Physician to the London Hospital.

Births.

BARKLEY.—On May 14th, at Athbeagh, Sandy Lane, Cheam, Surrey, the wife of Lieut.-Col. J. Barkley, 3rd H.C.F. Amb., R.A.M.C., of a daughter.

BROCKMAN.—On May 31st, at Ellerdale, Ashcroft, Cirencester, Glos., the wife of John Thomson Brockman, of a daughter.

CORRY.—On April 5th, at The Oaks, Liss, Hants, the wife of H. B. Corry, B.A., M.R.C.S., L.R.C.P.Lond., of a daughter.

HAIG.—On May 30th, at Hedgeley, Banister Road, Southampton, the wife of Lieut.-Col. P. B. Haig, I.M.S., of a daughter.

MOBERLY.—On May 29th, at Avondale, Ditton Hill, Surrey, the wife (née Violet E. Stevenson) of Dr. Alan V. Moberly, of a daughter.

MORTIMER WOOLF.—On Monday, June 5th, at 81 Wimpole Street, W., the wife of Captain A. E. Mortimer Woolf, F.R.C.S., R.A.M.C., of a daughter.

O'CONNOR.—On May 29th, at 21, Alexandra Mansions, Chelsea, to Capt. F. W. O'Connor, R.A.M.C. (temporary), and Zella O'Connor, a daughter.

SHONE.—On May 26th, at 40, Bath Street, Jersey, the wife of Henry J. Shone, M.B., B.C.Cantab., of a son.

WALKER.—On May 30th, at Malton, the wife of Dr. L. C. Walker, The Mount, of a daughter.

WAKEFORD.—On May 31st, at 728, Fulham Road, the wife of V.D.C. Wakeford, M.B., B.S., of a son.

Marriages.

LANG-HODGE—SYMES.—On May 30th, at Crediton Church, Captain W. Lang-Hodge, R.A.M.C., to Marian Hilda Symes, Manor House, Crediton.

PHILLIPPS—STEWART.—On June 2nd, at St. Ninian's Episcopal Church, Glasgow, Captain Richard Biddulph Phillipps, R.A.M.C., elder son of Mr. and Mrs. Jacob Phillipps, of Ellerker Lodge, Richmond, Surrey, to Katherine Jane, youngest daughter of the late Captain James Stewart, 16th Lancers, and Mrs. Stewart, of Williamwood, Cathcart, Renfrewshire.

SANER—DENOUX.—On May 31st, at Brompton Oratory, S.W., by the Rev. Father John Talbot, John Godfrey Saner, M.C.Cantab., F.R.C.S.Eng., of Guy's Hospital, son of the late Captain C. T. Saner, of Natal, S. Africa, to Fernande Gabrielle, daughter of the late Monsieur Denoux and of Madame Denoux, 44 Rue Nicolo, Paris.

SHARMAN—CHISHOLM.—On June 3rd, at St. Clement's Church, Hastings, Henry Sharman, M.D., eldest son of the late Francis Sharman, of Hampstead, to Nancy Matheson, younger daughter of the late William Chisholm, of Hampstead, and of Mrs. Chisholm, of High Wickham, Hastings.

WYATT—BRIGGS.—On May 31st, at St. James's, Piccadilly, H. D. Wyatt, M.D., of Green Lanes, Godalming, to Gertrude May Briggs, widow of Charles Briggs, of Norwood.

Deaths.

CENTER.—On Friday, April 28th, at the Royal Naval Hospital, Bighi, Malta, of wounds received on April 27th when H.M.S. Russell was sunk in the Mediterranean, William Rudolf Center, M.B., Fleet Surgeon, Royal Navy.

ELLIMAN.—On June 3rd, at Bella Vista, San Remo, Italy, after a very long illness, Arthur Charles Elliman, M.R.C.S., L.R.C.P., aged 50.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

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AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

News and Nerves.

IT is obviously useless to add to the chorus of disapproval which on general and sufficient grounds has been sounded in the lay press on the subject of the manner of the Admiralty's first announcement of the great battle in the North Sea. There is, nevertheless, a medical side to the question to which, in view of future announcements of a similar nature, it is fitting that attention should be directed. The battle took place on Wednesday, May 31st, and the public was informed so late on Friday, June 2nd, that it was impossible for anyone to obtain further details. Whether this was done of malice prepense, so as to save the officials from being subjected to inquiries to which no answers were possible, I do not pretend to know; but this I do know, that the manœuvre, if it can properly be so described, was the cause of a very great deal of insomnia on Friday night. It is not fair that people whose nerves are already on the stretch should be subjected to the ordeal of partial information depressingly presented, just before bedtime. To have waited until the morning could have done no one any harm. Bad news is more bearable in daylight.

Medical Officers and the Battle.

So far as has been ascertained up to the time of writing, the toll of medical men exacted by the great battle amounts to about 25, to which must be added at least three who went with Lord Kitchener to his untimely and much lamented end. Among these, no less than nine appear to have been probationers—students, that is, in the final years of their studies. To the relatives and friends of these surgeons and probationers we tender our respectful and most heartfelt sympathy. Steadfastness and devotion to duty are never wanting in medical men in times of stress, but there is a something about the conditions of service at sea which calls for these qualities in a very exceptional measure, to which Britons are always anxious to render homage whenever they are displayed.

Christopher Addison.

THE Birthday Honours list, which is a long one, reveals its usual economy of recognition of medical service to the State. Of the names of those members of the profession who have been honoured on this occasion the best known to the public is certainly Dr. Christopher Addision, to whom we offer our heartiest congratulation on his Privy Councillorship, a distinction which is much coveted in the political circles in which he now moves. Christopher Addison was born in Yorkshire in 1869. After qualifying in 1891, he proceeded to the M.B., B.S.Lond. in 1892, the M.D. in 1893, and the F.R.C.S.Eng. in 1895. He was for some time Lecturer on Anatomy at Charing Cross Hospital, and Dean of the School, also Professor of Anatomy at University College, Sheffield. When he was returned as M.P. for Hoxton in 1910, he was Lecturer on Anatomy at his old school, Bart's, at which he was a popular and respected teacher. He speedily made a mark in political life; but he found his new activities so exacting that he relinquished his professional and scientific work to become an administrator. He is a staunch upholder of professional interests in the House of Commons, and the profession may well feel honoured by the distinction which has been conferred upon him.

Sir Armand Ruffer.

DR. ARMAND RUFFER, on whom a knighthood has been conferred, thoroughly deserves his distinction. Some years ago he contracted a *post-mortem* wound which laid him up for a long period of time, and he recovered from it so partially that it became evident that he would not be able to remain in this country. He therefore went to Egypt at Lord Cromer's suggestion, where he has since done remarkably good work, in spite of the physical disabilities which his illness continued to impose upon him. In 1905 he was made a C.M.G.; he is President of the Sanitary, Maritime and Quarantine Council of Egypt, and Egyptian representative on the International Bureau of Hygiene in Paris. He was one of the founders of the British Institute of Preventive Medicine. He has already received a great number of foreign decorations. Armand Ruffer took his B.A. of Oxford in 1883, his M.B. in the same University in 1887, and his M.D. in 1889. He has contributed a great deal to our knowledge of bacteriology, and is, in the widest sense, a sanitarian. Sir Armand Ruffer is brother to Mr. Ernest Ruffer, who was for many years President of the French Hospital in London. They are sons of Baron Alphonse de Ruffer, a native of Lyons.

Sir Nestor Tirard and Others.

PROFESSOR NESTOR TIRARD, who, as his name implies, is also of French extraction, and who now adds another title to the staff of King's College Hospital, has been Professor of Medicine at King's College for many years. He became an M.B. London in 1877, and an M.D. in 1881. Besides being physician to King's College Hospital, he was for some time physician, and is now consulting physician, to the Evelina Hospital for Children. He has written much on the subject of renal diseases, on which he is an acknowledged authority: in addition there is the well-known text took on "Medical Treatment" to the credit of his pen. He is now Lieut.-Colonel commanding the 4th London General Hospital. The other titled members of "King's" staff are Sir David Ferrier and Sir Hugh Beevor, Bt., consulting physicians; Sir Watson Cheyne, Bt., senior surgeon; Sir St. Clair Thomson, laryngologist; and the immortal Sir Ronald Ross, who is the physician for tropical diseases.

Mr. F. M. Farmer.

OUR dental colleagues will be gratified with the distinction which has been conferred upon Mr. Francis Mark Farmer. Mr. Farmer is already the recipient of a presentation from the Secretary of State for War, 1902. He has been one of those who have successfully sought to raise dentistry from a mere art into a science which includes the osteology of the jaws as well as bacteriology of the gums, and has approached the practice of his profession from a thoroughly scientific as well as from a practical standpoint. He was qualified in 1894.

War Psychoses.

THE article on the "Treatment of War Psychoses" which appeared on page 507 of our last issue gains additional point from recent events. To every medical man who read the evidence at the court martial on the execution of Mr. Skeffington, it was quite obvious that this most deplorable event could not have occurred if the responsible officer had been in perfectly good health. Now there are an enormous number of military men, officers and men, who, though not seriously ill, are by no means well; who are "déséquilibrés" as the French say, and who ought in consequence to be under expert treatment. Such treatment is admittedly not easy to obtain, but a little organisation of such talent as is available would very soon make all the difference between really good results and the present chaotic state of matters, in which, with the label of neurasthenia affixed to him, the unfortunate sufferer is either returned to duty for which he is totally unfit, or drifts his wretched way into an institution for the insane.

Unfit.

AN instance of the former is provided by the court martial above referred to. The following is an extract from the speech of the counsel for the defence, as given in the *Times*. "The Court could appreciate what occurred at the battle of Mons and how it affected Captain Colthurst. General Bird's evidence was that Captain Colthurst completely broke down after that battle, and that his conduct was such that he had to be suspended from duty. In view of this they could imagine his mental condition in such circumstances as those of April 26th. The wounds be received at the battle of the Aisne had a serious effect on his system. Physically he was a wreck, and mentally he had suffered in a corresponding degree." If this is not a gross exaggeration, it is quite obvious that this officer should not have been placed in a position where, by any possible combination of circumstances, he could be called upon to exercise judgment on any military question, however trivial. He ought to have been under suitable suggestional treatment in a hospital provided for such cases.

The Asylum.

AN example of the other extreme is provided in a letter which appeared in the *Military Mail* on June 2nd. It is signed "E. H. Kelly," who writes from the National Relief Fund Sub-committee, Portsmouth, "I have found one class of men who do not appear to be receiving adequate attention or treatment: those who are suffering from acute nervous shock, causing in certain cases a complete mental breakdown, which may be of a temporary or permanent nature. Those men require more supervision than can be arranged conveniently in naval or military hospitals, and consequently they are frequently discharged to their homes with so-called 'neurasthenia,' which may be considered 'attributable' or 'non-attributable.' In certain instances bad cases have been sent home without even an attendant for the journey, with disastrous consequences. Later, more acute symptoms may appear, and their relatives have no choice but to apply to the relieving officer for their admission to the local asylum, where they are treated as pauper lunatics. In spite of the fact that the full cost of their maintenance may be deducted from their pensions, they are still technically paupers." The letter closes with the suggestion that an extension of Lord Knutsford's scheme for the treatment of nerve-cases might meet the situation. It is at any rate abundantly clear that something ought to be done and done speedily.

Infectivity of Measles.

A CORRESPONDENT writes to ask me whether it is possible that the body of a child who died from measles is capable of conveying the virus of that disease, to which I must reply that I do not know. This is a question which arose at Middlesbrough not very long ago, when the Stipendiary Magistrate was called upon to come to a decision on the subject. There appear to have been two hearings of the case. At the first hearing, on the ground that there was no actual contact, the case was dismissed. It was then taken to a higher Court, who returned it with the recommendation that the Stipendiary should convict if he was convinced that there was such close proximity as to give rise to infection. Dr. Dingle, medical officer of health for Middlesbrough, said that anyone entering a room where there was the body of a person who had died

from measles was running a grave risk of infection, and Dr. Sidney Mostyn, the medical officer of health for Darlington, said that, judging from analogy in regard to other infectious diseases, risk of infection from a body of a person who had died from measles was considerable. These two medical officers were obviously right in the views which they expressed. Until we know the exact nature of the infection in measles, it is impossible to be dogmatic, but it is quite evident that if error there is to be, it should be on the side of safety.

Mending the B.M.A.

The suggestion made by Dr. Ross, of Bedford, in the letter we published last week, namely, that I should rejoin the British Medical Association and assist in the mending of it, does not at all appeal to me. While gratefully acknowledging the implied compliment, I fear I must decline to undertake a task which I believe to be outside the compass of any mortal man, or indeed of any body of immortals. To mend the B.M.A. for political purposes it would be necessary to alter its constitution, which would be a formidable undertaking. Then it would be necessary to overcome the deeply rooted antagonism which the Association has created for itself among the members of the profession; and, finally, it would be necessary to persuade the public generally and the politician in particular, that the purged and purified body which emerged Phœnix-like from its cleansing fires, was no longer governed by noodles and nonentities vested with a little brief authority in virtue of which they masqueraded as diplomatists and men of business. I adhere to my view that the B.M.A. is Humpty Dumpty, and I do not flatter myself that I could succeed where all the King's horses and all the King's men have proverbially and notoriously failed.

Its Impotence.

Now, I shall certainly be asked why I think that its constitution would have to be changed; so to save trouble I may as well at once proceed to explain. I said recently that the B.M.A. was "neither fish, flesh, fowl, nor good red herring." In adopting that classical phrase I was not merely swearing at large. I meant to remind my readers of the fact that among the many things that the Association has stupidly arrogated to itself, is the status of a Trade Union. Now, if it was to accomplish anything *vis-à-vis* such an astute politician as Mr. Lloyd George, it was obvious that in the last resort it might have to appeal to the immunities of Trade Union Law. It negotiated about the Insurance Act as though it could so appeal. Mr. Lloyd George knew that this was mere bluff, and he treated the B.M.A. as, in the circumstances, it richly deserved to be treated. But it was the Profession that suffered. If there were to be any hope of effectively mending the B.M.A. for political purposes, the Association would have to become a Trade Union.

Tapers and Tadpoles.

I don't suppose its existing constitution would permit of this. In any case the present Tapers and Tadpoles (it is the fashion to quote Disraeli) who control the machine would never consent to anything either so definite or so efficient. Their god is respectability. While posing as the leaders of a learned profession, they dally clumsily with the tools of the determined artisan. Willing to wound, and yet afraid to strike, they assume threatening attitudes, exact solemn pledges, and then basely abandon the position. Such appears in their view to be the way in which gentlemen behave. A body which is in earnest, which knows what it wants and means to achieve it, will have to divest itself of this garment of bourgeois pseudo-gentility. It is very well that a suit of broad-cloth should conceal the fustian for Sunday wear, but when the broad-cloth conceals nothing more servicable than motley, it is no wonder that its wearer refrains from taking off his coat. The British Medical Association has never taken off its coat. And it never will; for it dare not. It clings to the respectable exterior, for the good reason that beneath it there is nothing save the multi-coloured motley of the mildly-mannered, muddle-headed, middle-class fool.

A Trade.

If the Profession really means business in the approaching struggle it must look facts in the face. It may be good policy to assume the airs of a *grand seigneur*, to take your stand upon the basis of a great and learned profession which despises trade, so long as such an attitude is likely to serve your purpose. But when your opponent is vulgar enough to treat you as a trade, to speak of you as a trade, and to approach negotiations with you as though you were a trade, and that a mercenary, commonplace and incompetent one, the sooner you appoint yourself a trade, arm yourself as a trade, and defend yourself as a trade, the better for your own material interests and those of the public whom you serve. The policy of turning the other cheek may appeal to the conscientious objector, but the full virtue of such an attitude is not apparent in the practical politics of a sordid, stiff-necked, and still partially prussianised generation. To the actualities of the British Medical Association I frankly prefer the potentialities of the Panel Medico-Political Union, which seems to have no illusions as to the best methods to adopt towards politicians. It is a real trade union, and makes no fetish of professional gentility.

Sinapis

St. Pancras Board of Guardians have appointed Mrs. Thackray, a qualified doctor, to act as assistant to her husband, the Medical Officer to the Board, during the present shortage of doctors.

Mr. John William Wilson, of Harrogate, bequeathed £1,000 to the Leeds General Infirmary, £500 each to the Leeds Hospital for Women and Children, the Royal Bath Hospital and Rawson Convalescent Home, Harrogate, and the Harrogate Infirmary.

CURRENT TOPICS.

The Cause of Carcinoma.

THE cause of carcinoma is one of the most baffling of the problems which have for years past been occupying the minds of men of science. The condition has been known to develop under the influence of a great variety of stimulants, and all researches hitherto have failed to reveal any specific external agent. The only factor common to all these stimulants is the production of a chronic irritation. An interesting article by Dr. A. E. Rockey, published in a recent number of *Surgery, Gynæcology, and Obstetrics* (February, 1916), contains a brief and lucid statement of our present position with regard to this subject, and propounds the theory that there is no specific external agent responsible for the growth of a carcinoma, but that the tumour is the result in every case of a defensive tissue growth reacting to a repeated irritation where the latter is sufficiently severe to destroy the limiting basement membrane. That is to say, the irritation provokes the epithelial cells to great karyokinetic activity, and just so soon as the basement membrane is injured will some of these rapidly produced cells find themselves astray amongst the connective tissue cells of the interior. Because of their rapid multiplication they are now atypical epithelial cells becoming more and more embryonal in type and therefore nearer to the surrounding cells of mesoblastic origin. The defensive nature of the reaction causes a diminution of the antagonism between mesoblastic and epithelial cells, whereby the latter having their energy unimpaired continue to multiply rapidly until they not only crowd out the normal tissues so as perhaps to cause pressure necrosis, but also extend by multiplication along the lymph channels and form metastases in the nearest glands. In support of this theory, Dr. Rockey quotes the great variety of stimulants known to have produced carcinoma, mechanical, chemical, thermal and radiant —what other common factor may we hope to find?

Finger Nail Deposits.

THE medico-legal expert has long since learnt to concern himself with details and to consider microscopic evidence of as much importance as any which is plainly visible to the eye. It is a commonplace to deduce from one hair the nationality and temperament of its owner, whereas the study of finger marks and footprints has been reduced to a fine art and yields astonishing results. In a recent number of the *Journal of the American Medical Association* (May 20th, 1916) Dr. Albert Schneider advocates the routine examination of an even more intimate material, always procurable, and always testifying to the habits and recent occupations of the owner—the scrapings from beneath the finger nails. Ordinary cleanliness of personal habits does not remove these nail deposits, they are absent only when the nails are kept trimmed so close as almost to cause bleeding—a rare circumstance. Most commonly these deposits contain bacteria of the streptococcus, staphylococcus and B. coli groups, while less frequently yeast cells are found, spores and filaments of the higher fungi, larvæ of vermes, etc. Besides these organisms the deposits will contain vegetable or mineral substances according to the occupation of the host. In medico-legal work the examination of these nail deposits will be principally useful in cases of alleged physical violence, and particularly where the victim is unarmed. His nail deposits then will show fragments of skin epithelium, blood corpuscles, and perhaps hair. Dr. Schneider also draws attention to the transmission of infections by means of finger nail deposits. Auto-infection frequently causes boils, carbuncles, and even septicæmia, while he asserts that hetero-infections may be caused by stroking or caressing the head or face, or even by the simple handshake. The wisdom of the Chinese is proverbial, they avoid this danger by shaking hands with themselves. We wonder how soon our lives will be ordered according to our knowledge. The act of kissing is, we know, dangerous in the extreme, and not to be indulged in by any man of science who values his life and health, but let that not affect us unduly, for very soon the physician or surgeon will be the only man permitted to touch another with his hand—after evulsion of the finger nails.

Royal College of Surgeons of Ireland.

THE annual election of President, Vice-President, and Council of the Royal College of Surgeons of Ireland took place on June 9. Mr. William Taylor, Vice-President, was unanimously elected President, and Mr. J. B. Story was elected Vice-President. Sir Charles Cameron was re-elected Honorary Secretary, and the following were elected to seats on the Council :—Mr. W. Stoker, Sir C. Cameron, Sir Lambert H. Ormsby, Messrs. R. D. Purefoy, H. G. Sherlock, Sir Thos. Myles, D. Edgar Flinn, Sir Arthur Chance, S. M'C. Boyd, Sir Robert H. Woods, R. B. M'Causland, T. E. Gordon, E. H. Taylor, F. Conway Dwyer, A. J. M'A. Blayney, R. C. B. Maunsell, T. N. Smith, W. I. Wheeler, and Sir C. Arthur Ball. The only new members of Council are Colonel Edgar Flinn and Sir Arthur Ball. They take the places vacated by Mr. R. Lane Joynt, who was a candidate for the Vice-Presidency, and by the death of the late Sir Charles Ball.

A Prize Child.

COLE NEWTON, of New Jersey, has put forward a comprehensive scheme for improving the physique and physiology of American children, comprising systematic physical examination throughout their academic curriculum, with allocation of marks for qualities ranging from personal beauty to dental integrity. What is more important, unless certain minimums are satisfied, progress to a higher grade is not to be welcomed, the inference being assumed that unless bodily efficiency is assured, that advance in studies constitutes a strain upon the child's economy, even although mentally, at a superficial consideration, they are capable of meeting the promotion. The procedure culminates upon leaving the primary school, when those pupils who have attained a certain marking for physical condition are allowed to compete for substantial money prizes. Whilst fully sympathising with regular inspection of children's health, we consider the introduction of any competitive element as grossly unfair. If a boy or girl possesses a comely face or a symmetrical little body, it no particular credit to his or her efforts—though it may be a credit to the parents. Because Master Smith can swell his chest bigger by two inches than Master Brown, is no reason to present him with 500 dollars and a swelled head. Children, being for the most part natural animals, are instinctively vain of their physical good qualities; aggravation of such vanity is to be discouraged. Supervise the health, mental and physical, of our children, vigilantly and constantly. Do not make the pain experienced by the plain or physically defective child more exquisitely acute than it can be already

by decorating his more happily endowed brothers and sisters after the manner of prize cattle.

Silence.

ATTENTION has recently been drawn to the necessity of forethought in the selection of a hospital site. Too frequently, retirement, relatively pure air, and tranquillity are entirely sacrificed to a central position. Such a position is indeed imperative from a city point of view, in order that urgent cases may come under treatment without delay. The oxygen question, therefore, must perforce take second place; but much more might be done to ensure an absence of gross and disturbing sounds in the immediate vicinity of hospitals. Placed upon some central artery of traffic, in the midst of what in certain cities amounts to a continuous roar of vehicular business, such conditions are far from hastening the recovery, or conducing to the rest of patients, high strung with pain and exhausted from insomnia. Young America, with characteristic thoroughness, has devised what are termed "zones of silence" in connection with such institutions, whereby a compulsory diversion of heavy traffic is enforced for a certain radius around the building. In home cities we are satisfied with the laying of wood pavement over a street area corresponding to the hospital frontage. The futility of such a characteristic compromise is self-evident.

State Medical Service.

As if to emphasise the truth of the warnings of "Sinapis" on the above subject, the medical correspondent of the *Times* returns to it in the issue of our contemporary of June 12. He states that "There is reason to think that the relations of the medical profession to the State and public must soon undergo a change. As the demands of the Army become more insistent, the dearth of doctors becomes more evident. The result has been a very ill-informed attempt to show that the Army is getting more than its share. This statement is both mischievous and untrue. The Army needs all the doctors it has got.

"The real waste of doctors is going on in civil life—a fact not usually noticed by the carping critics of the best medical service organisation in the world. The waste results from lack of organisation and allows several doctors to compete still for the work in small areas while larger areas are undermanned. In other words, the civilian medical profession is where it was before the war.

"This is a great national question, and there is every reason why the Government should take it up forthwith and settle it. The settlement must be upon broad lines and must be national; yet it must regard interests already established. At present one type of doctor is charging £9 9s. with all expenses for "doing a locum," while another type is relinquishing a good practice—losing it often—for the sake of his country. I know of several cases in which practices have been lost beyond recall because their owners joined the Army. All this worry and waste arises out of the lack of a national scheme, and if the time for laying the foundations of a State medical service was ever ripe it is ripe now."

It is widely believed that there is now a close political relationship between Lord Northcliffe and Mr. Lloyd George, and the latter appears at present to be the spoilt darling of the Harmsworth Press. We have more than a shrewd suspicion that the quotation from the *Times* does not state the view alone of one individual. The voice may be that of the *Times* Medical Correspondent, but, if we mistake not, the hand is that of the politician.

The lesson for the medical profession is clear. We must act on the assumption that State medical service is coming. We must organise, so that a united profession can meet the politicians on their own ground and exact fair treatment. After the Insurance Act debacle, it is certainly not to the British Medical Association we must turn for light and leading.

Soldiers Disabled by Disease.

WE welcome an Army Order issued on June 11th under Royal Warrant, relating to pensions for soldiers discharged on account of disease not wholly due to war service, but aggravated by it. Amongst other enactments it provides that a European soldier discharged in consequence of the present war as unfit for further service on account of disease not directly and wholly due to war service, but aggravated by it, may be granted a pension equal to four-fifths of the pension, including allowances for children, which would have been awarded to him under Articles 1 to 3 of the Royal Warrant of May 21st, 1915, if his disability had been due directly and wholly to war service. We consider this but elementary justice. The State already, by means of the Workmen's Compensation Act, holds an employer responsible for any disease which, though present before an accident, has been so aggravated by such accident as to incapacitate the workman totally or partially. To treat the soldier broken in our war worse than the man in the workshop is repugnant to all good feeling.

Many sad cases are known where latent disease, which, but for the rigours of campaigning, might never have disclosed itself, has resulted in total breakdown in health. Such are as truly war wounded as if mangled by shell, and should receive every consideration from a grateful country.

PERSONAL.

SIR ARTHUR CHANCE, F.R.C.S.I., has been appointed Consulting Surgeon to Dr. Steeven's Hospital, Dublin.

DR. A. E. BARNES, Honorary Physician to the Sheffield Royal Infirmary, has left for an important oversea military centre, where he will take full medical control of hospital work in connection with His Majesty's Forces.

LIEUTENANT-COLONEL ARTHUR L. A. WEBB, C.M.G., has been appointed a Deputy Assistant Director-General in the Army Medical Service, vice Lieutenant-Colonel H. P. W. Barrow.

MISS IRENE HYLAND, B.A., of the University of Toronto, and for six years dietician at the Bellevue Hospital, New York, is coming to England to serve as dietician with the Harvard Medical School unit in the British Army Hospital Service.

SIR WILLIAM JAMES THOMAS, who has made a donation of £100,000 towards the establishment of a Welsh school of medicine, equipped the Welsh University Medical School at King Edward VII. Hospital, and subscribed £10,000 to Cardiff Infirmary. He received his knighthood in 1914.

DR. ROBERT ROBERTSON, J.P., an Honorary Physician and Chairman of the Visiting Committee of the Royal National Hospital for Consumption, Ventnor, has been unanimously elected a Vice-President of the Institution in recognition of his invaluable services during the many years in which he has been associated with it.

CLINICAL LECTURE

ON

THE CASE OF A COW, A HAT-PIN, AND A BAILIFF.*

By SIR JOHN BLAND-SUTTON, F.R.C.S.,

Surgeon to the Middlesex Hospital; Major R.A.M.C.

IN order to make the points in this lecture clear, it will be necessary to describe the anatomical features of the stomach of a ruminant, for the patient was a cow.

The stomach of oxen is very complex (Fig. 1). It contains four compartments: Of these, the first is a large receptacle called the rumen or paunch. The second is a smaller compartment, or recess, closely connected with the rumen and known as the reticulum; this, when cleaned, becomes honeycomb, the choicest kind of tripe. The reticulum receives the food from the gullet.

The third compartment, called the omasum, may be described as a dilatation of the canal between the reticulum and the abomasum; it is ovoid in shape and as big as a man's cranium. The walls of the omasum are thick and muscular, and its mucous membrane is arranged in folds, or leaves. Nearly a hundred folds hang from its dome; they stretch from the œsophageal opening to the entrance of the abomasum. The folds vary in depth (Fig. 2) and produce an appearance like that of the flies of a theatre seen from the stage. These folds earned for the omasum the name of manyplies, and psalterium, from the likeness to a book. Butchers call it the bible.

Ellenberger (1881) investigated the structure and function of the omasum and described it as a triturating apparatus, or masticatory stomach. The leaves near the entrance are furnished with long warts or papillæ, resembling the teeth of a harrow;

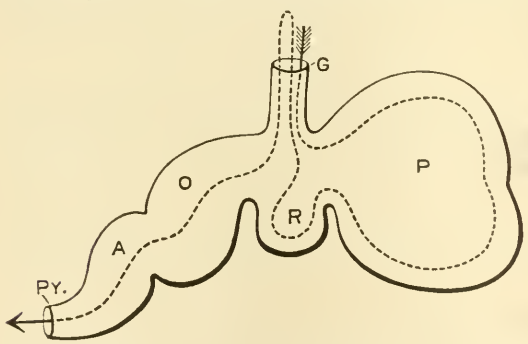

FIG. 1.—A diagram of the four compartments of the stomach of an ox. The dotted line shows the track of the food.
G. Gullet. P. Paunch or rumen. R. Reticulum.
O. Omasum. A. Abomasum. Py Pylorus.

their hard, horny points are so arranged as to hinder the reflux of food to the reticulum. Towards the abomasum the papillæ are shorter, closer set, flattened, and resemble the low elevations of a rasp, or a file. The covering of the leaves is hard, almost horny, and very resistant to dilute solutions of acids, alkalis and peptic juices. The walls of the omasum contract powerfully. Food between the leaves is thoroughly rasped by the papillæ before it enters the abomasum, the true digestive compartment.

* Lecture delivered at the Middlesex Hospital.

After death the omasum is firmly contracted, but the walls of the other compartments of the stomach are relaxed. The stomach generally is under the control of the pneumogastric nerve, but Ellenberger found that stimulation of this nerve has no influence on the omasum. Nerve plexuses and multipolar nerve-cells are present in the walls of the omasum, but no ganglia. The fourth compartment, known as the abomasum, is the true stomach; its glands secrete gastric juice. This acid secretion is called rennet. Dairymaids use the rennet of calves for curdling milk, the first step in cheesemaking.

It is useful to compare the stomach of a calf with that of an ox. In the new-born calf the fourth compartment, or abomasum, is larger than the rumen (Fig. 3). A few months after birth, when the calf feeds on grass, the rumen enlarges rapidly, and in eighteen months the relative sizes of the various compartments are as follows: Rumen, 80 per cent., reticulum 5 per cent., omasum and abomasum nearly equal each other—together 15 per cent. The tooth-like papillæ around the entrance of the omasum are very conspicuous in a calf a few weeks old.

When the cow feeds she encircles the grass with her long, prehensile rough tongue, and tears it off. Moistened with the saliva, the bolus of grass is conveyed by the gullet to the paunch. The fluid in the paunch consists of saliva, which is freely secreted, and water. In the paunch the food is macerated in an alkaline medium assisted by the churning movements set up by the muscular tissue in its walls. Cows, and especially calves, lick and swallow hair from their hides; the churning of the contents in the paunch causes the hair to felt and form balls, often called ægagropiles. The Hospital museum contains some good examples.

When feeding, cows often swallow odd things that may be lying in the grass, such as a frog, a purse, or a tobacco pouch; garters, bracelets, crosses and similar trinkets dropped by lovers; darning needles, knitting needles, sewing needles; crochet hooks, button hooks, wire, forks, nails, blades of knives, scissors, and hymn books. The capacity of a cow's stomach is about 20 gallons.

When the cow has satisfied her appetite, she lies down on one side, generally in the shade; then an apparently involuntary twitch of the flank sends a bolus of grass up the gullet, by reversed peristalsis, into the mouth. This bolus, probably moulded and ejected into the œsophagus by the reticulum, which is capable of energetic contraction, is ground fine by the molar teeth, mixed with saliva, and re-swallowed. This grinding act is known as rumination. The weight of the bolus is about four ounces and the time occupied in each act of rumination nearly a minute. A painstaking observer calculated that the cow spends about seven hours out of twenty-four in ruminating.

When the food returns to the stomach some falls into the rumen, but much of it goes into the reticulum and the omasum, thence onward to the abomasum, where it comes into contact with the

gastric juice. The larger portion of the ruminant's stomach is like a pocket, non-digestive.

These facts prove that grass is not digested in the same way as a mutton-chop.

It must be obvious to anyone who clearly grasps the disposition of the various compartments of the stomach of an ox that elongated foreign bodies, such as wire, hat-pins, needles and blades of knives, when swallowed, will have some difficulty in threading the maze offered by the omasum. An ordinary sewing-needle would easily enter. I have seen one stuck in a leaf of the omasum. Needles and wire often get into the reticulum, and the forcible contractions of its walls cause a pointed body to penetrate and find its way through the diaphragm into the pleura, the pericardium, the heart, or the lung. Sometimes such sharp things are forced into the belly. Such accidents often lead to infective changes that end in death.

Veterinary surgeons who have studied these con-

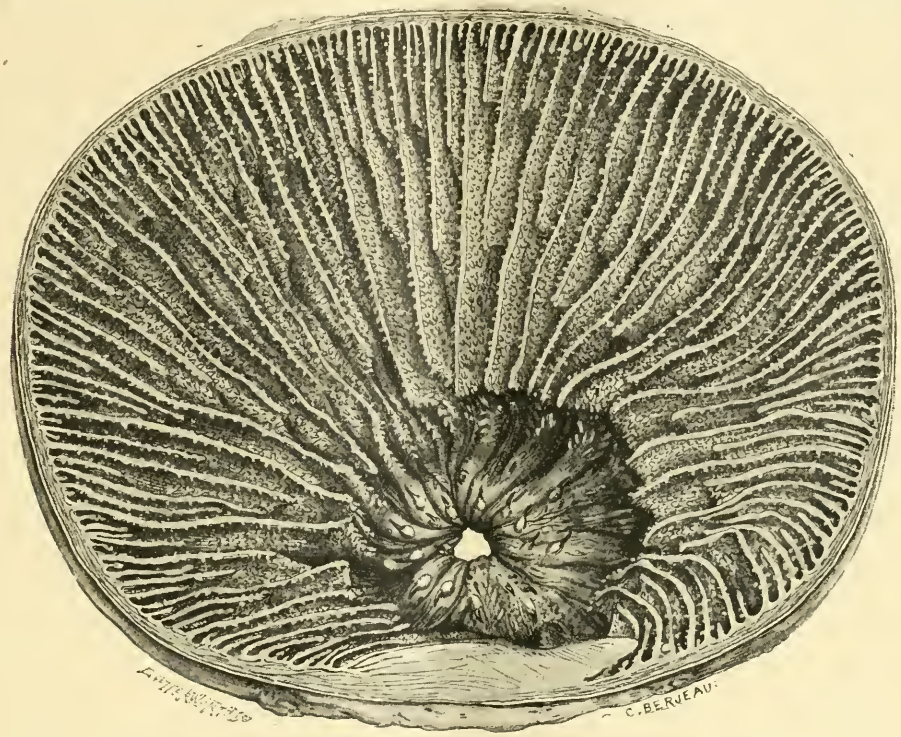

FIG. 2.—The Omasum (Psalterium or manyplies) of an ox in transverse section, showing the large papillæ at the orifice leading from the reticulum. (½ nat. size.)

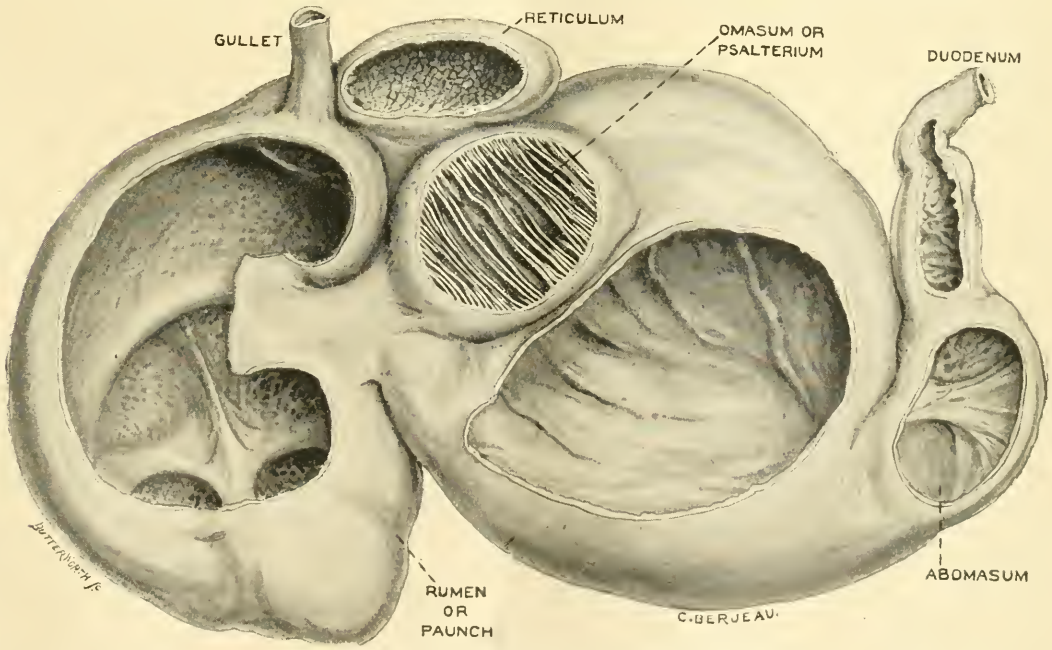

FIG. 3.—The stomach of a calf. The rumen is smaller than the abomasum. (½ nat. size.)
(Museum, Royal College of Surgeons of England.)

ditions, realising the frequency with which such dangerous foreign bodies are retained in the reticulum, have approached this compartment of the stomach through an incision in the flank, opened the reticulum and extracted the offending wire, or needle, as the case may be. It is gratifying to know that in a fair number of cases such operations have been successful, not merely in finding and removing the foreign body, but in saving the life of the animal.

THE HAT-PIN.

A charming lady, on her thirtieth birthday, received from her devoted husband a hat-pin surmounted by pearl. Later in the day she visited the mansion of her parents, and as haymaking was in progress, full of glee, all took tea in the hayfield. The lady took off her hat, placed it on the grass and stuck the pin in the ground near the hat. The wind was playful and quietly blew the hat about. When the lady picked up her hat she could not find the pin. Mother, father, sister, servants, haymakers, male and female, joined in the search. They raked the grass and racked their brains until darkness put an end to the search. The birthday, in spite of the brightness of the day, ended in gloom.

The scene shifts to Christmas. The lady who lost her hat-pin spent the holiday with her parents. On the morning of Boxing Day the bailiff reported that the prize cow was ill and the vet. was puzzled to account for the symptoms. Two days later the cow died and at the *post-mortem* examination the hat-pin was found; it had pierced the wall of the reticulum and entered the pericardium.

The story is clear. The cow, when eating grass, had accidentally swallowed the hat-pin and in due course it penetrated the stomach and inflicted a fatal injury.

THE BAILIFF.

The bailiff, incidentally mentioned in this case, was a peculiar man and attracted my attention two years before the cow episode. The mansion of my friend had large capacious chimneys which served as excellent nesting-places for some jackdaws. There was a disadvantage in this, for when winter came the nests interfered with the escape of smoke and it became necessary to send men on the roof to remove the nests. To avoid this the bailiff had the chimney-tops covered with wire-netting. The following spring the enterprising jackdaws, finding the chimneys closed against them, flew to the stables and turned the pigeons out of the dove-cotes, and there they built nests, laid eggs, and successfully hatched them.

About the time of the cow's death the bailiff's conduct excited comment. When he sent flowers to the mansion they would differ in variety, in colour, or in kind. For example, he would send, roses, geraniums and pansies; anemonies, hyacinths and daffodils; tulips red, white and blue. In the same way he would send vegetables and fruit for the table, always three kinds. The animals were sent into the fields in groups of three, or of three kinds: cattle, sheep and pigs; a cow, calf and pony; an ox, an ass and a horse. This eccentricity excited comment and amusement. He would send three men to work in a field, or dig the garden; or a man, a woman and a boy. Gradually his master noticed that the fruit trees were being pulled up so that those left stood in groups of three. It then became a serious matter. Finally he began to fell the timber so that three trees stood together. In one field the trees would be an alder, ash and elm; in another, oak, ash and thorn. In one meadow it was fortunate that he spared an interesting thorn that marked the course of an old road along which Queen Elizabeth rode when she went to the revels at Kenilworth. I have seen that thorn. The cows could ruminate in the shade of the oak, the pony could scratch his rump against the ash, and sheep could leave their wool on the thorn. When the bailiff began to cut down timber trees matters became serious—his sanity was in doubt; then followed a consultation. He was found to be a religious monomaniac. In vulgar language, he was cracked on the Trinity. The poor fellow was incarcerated in a lunatic asylum and died within three months.

ORIGINAL PAPERS.

INFANTILE SURGERY. INHERITED SYPHILIS IN THE PRODUCTION OF BONE LESIONS.

By PROFESSOR KIRMISSON, M.D.,
Of the Faculty of Medicine of Paris; Surgeon to the Hôpital des Enfants Malades, Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

HERE is a case daily occurring in practice, yet one the pathogenesis of which is still being debated. The case is that of a female infant born on June 8th, 1913, so that she is now just over a year old. She was brought by her mother to the orthopædic out-patient department, and this is what we found.

The child is pale, thin, and looks ill-nourished. She is always moaning, and she displays even to the inexperienced eye the following manifestations of rickets—viz., narrowness of the upper part of the thorax, chondro-sternal prominences: the costal "beads"; a bulky, distended belly, and enlarged joints. The mother, however, especially calls our attention to the arching of the dorso-lumbar region: this is the kyphosis of the rickety young. This kyphosis differs greatly according to the age of the subject. As a rule, in big children, girls of twelve years of age and upwards, it is met with in the dorsal region, or, maybe, spread out over the whole length of the spinal column. This kyphosis of adolescence is accompanied by a compensatory lumbar lordosis.

In infants we often have to eliminate the possibility of Pott's disease, for the rigidity peculiar to this malady may be closely simulated by a state of contracture of the little patient at the time of examination. It is, indeed, often necessary to keep the child under observation for a time.

This child at the same time presents a scoliosis, best seen by radiography, with its convexity to the left in the dorsal region and compensatory curves in the cervical and lumbar regions. Lastly, at the posterior angles of the ribs, we find exostoses from the seventh to the ninth ribs on both sides, but more marked on the right. But this is not all, for we also find that there is slight shortening and leg-of-mutton deformity of the left thigh corresponding to a fracture at the junction of the lower two-thirds and the upper third of the bone. The line of fracture runs from above downwards and from within outwards. The two fragments do not override, but form an angle, the apex whereof corresponds to the antero-external part of the thigh. This, the usual arrangement, is due to the action of the abductors pulling on the fragments like the string of a bow. The shortening would be much greater were there any overriding of the fragments. The fracture is not united, as can easily be made out by gently twisting the limb, the movement eliciting soft grating.

Now, this fracture seems to have taken place spontaneously, that is to say, without any appre-

ciable traumatism, on January 7th, 1914. The mother's attention was attracted by the swelling of the thigh and the pain. She brought the child to hospital on the 9th, and the fracture was reduced and immobilised in a tiny gutta-percha apparatus, which is very convenient in small children who incessantly soil the dressings. Then, however, the child had to be transferred to another ward on account of a sharp attack of sore throat with a temperature of 104° F. When the child was brought back to this ward on February 22nd, six weeks later, no consolidation had taken place.

From February 22nd to April 7th continuous extension was applied with a one-pound weight. The deformity of the limb was thus corrected, but some mobility remained, and this had gone on increasing during the last five months.

Now, the child's father is a general paralytic—that is to say, syphilitic. On the other hand, there have been six children in this family, three of whom have died, one a few hours after birth, and the two others, twins born prematurely, reared in the couveuse for six weeks, died at the age of four months.

This case raises a first question—viz., is there any relationship between the rickets and the exostoses? Volkmann, in his monograph on diseases of the locomotor apparatus (in Billroth's "Compendium"), answers this question in the affirmative, and calls these exostoses *rachitis nodosa*. Vesselhagen and others, on the contrary, separate the exostoses from rickets. They hold that the exostoses bring about arrest of development in length, and so cause deformity of limbs with two bones, such as the forearm and leg. Exostosis of the radius determines inflection of the ulna giving rise to a peculiar form of club hand. Similarly, exostosis of the tibia determines incurvation of the fibula and varus club foot. When there is a very big exostosis of the ulna the radius is dislocated at its upper end.

Personally, I agree with Volkmann's theory, and the case of this child militates in its favour. There are plenty of instances in which these exostoses of development are accompanied by manifestly rickety deformities. But to point to a coincidence between rickets and these exostoses does not help us to solve the problem of pathogenesis. We shall have to invoke the influence of the great diatheses—that is to say, either tuberculosis or syphilis, and the most striking features are suggestive of hereditary syphilis.

The influence of hereditary syphilis is admissible in the case of this child on the strength of the father being a general paralytic on the one hand, and, on the other, the polylethality of the mother. This brings up the question whether there is any relationship between rickets and syphilis. You are all familiar with Parrot's patient researches and his not less memorable conclusions. According to this observer, not only is there a causal relationship between syphilis and rickets, but to all intents and purposes they are identical. It was in 1871 that he published in the *Archives de Physiologie* his researches on what he called syphilitic pseudo-paralysis, since known as Parrot's disease.

He described certain juxta-articular changes which, in his opinion, gave rise to this complexus which has as its seat of election the lower end of the humerus. Osteophytes form, between the bone and the periosteum, true chondro-calcareous formations, which undergo gelatinous infiltration entailing a fragility that finds expression in separation of the epiphyses and spontaneous fractures.

Parrot's disease, be it remarked, does not justify as gloomy a prognosis as was believed by its discoverer. I have seen a great many cases of the kind, and I have never seen death result. Two elements must be distinguished—the osseous lesion *per se* and the superadded suppuration by infection, and the latter may, of course, cause death in a debile subject. When the lesion is in course of repair, this chondro-calcareous layer undergoes a sort of hypertrophy, and we get actual nodules similar to those ascribed to rickets.

In this way Parrot concludes in favour of the identity of the bony lesions of hereditary syphilis and rickets. At present, however, this doctrine can no longer be subscribed to. I will concede that we daily meet with children presenting rickety deformities without any history of syphilis, but the fact remains that rickets is met with in practically all syphilitic children. Pinard remarks that "almost all children with rickets are the offspring of syphilitic parents."

Hereditary syphilis is not the sole and only cause, but it is *a* cause of rickets in a large number of cases. Such appears to be the case in respect of this child, our little patient, in whom we note the coincidence of hereditary syphilis, osteogenetic exostoses and rickets, so that the existence of a relationship between these lesions and hereditary syphilis is quite admissible.

And what about the fracture of the left thigh? You know that this is the fracture *par excellence* of young infants. Fractures of the upper limbs belong to the second period of childhood, between seven and twelve and onwards. Of 100 cases of fractured thigh 80 are to be found in the Baudelocque Ward—that is to say, they are in children under five years of age. It is rather more frequent in boys than in girls, no doubt on account of the greater muscular development of the former.

In this instance the fracture, if the mother is to be believed, occurred spontaneously—that is to say, in the absence of any outward visible traumatism. On the other hand, there has been no union after the lapse of nearly six months, whereas in fractures in young children we usually get firm union in about three weeks. If we were unaware of the child's antecedents we might have attributed the non-union to rickets, for it is certain that rickets, especially in the athreptic forms described by Parrot, is often responsible for delayed union of fractures.

But the general paralysis of the father and the polylethality of the mother justify us in suspecting hereditary syphilis. It is true that the child does not present any of the obvious stigmata (teeth, eyes, ears, skin, and mucous orifices), but that does not oblige us to reject the syphilitic hypothesis, as is shown in the following case :—

Not long since, in discussing palatoplasty, I had occasion to refer to the case of a young adolescent in the Bouvier Ward who presented a cicatricial adhesion of the soft palate to the posterior laryngeal wall. Now, this patient was cured by specific treatment, yet there was no history of syphilis in his person or in his family. It would have been necessary, of course, to have had the child under observation from its birth onwards for us to be able to affirm that there had never been any lesions suggestive of syphilis, but, as you are aware, there is such a thing as delayed hereditary syphilis. As a matter of fact, we not unfrequently meet with ulcerated sore throat characteristic of heredo-syphilis in subjects upwards of twenty years of age who have not been exposed to contamination acquired.

This is why we placed our little patient on a treatment comprising mercurial inunctions and the administration of Gibert's syrup (iodide of mercury), the fractured limb being at the same time placed in extension by means of a Liston splint.

EXOPHTHALMIC GOITRE. SYNONYMS: GRAVES' DISEASE; BASEDOW'S DISEASE; HYPERTHYROIDISM.

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WITH increasing knowledge, the conception of this disease has become a much more difficult matter than when it was regarded as being solely due to an overaction of the thyroid gland. Modern views as to the pathology of Graves' disease would have us believe that, although derangement of this gland is present in this malady, the thyroid is not the sole organ at fault, neither is a hypersecretion of this gland alone responsible for the symptoms.

Let us for a moment refer to some definitions of this condition which have been current, and then compare these with modern views as to the ætiology and pathology. In one text-book of medicine we meet the following definition: "A disease characterised by enlargement of the thyroid, exophthalmos, increased action of the heart, tremor and nervous instability." (1) Again: "The four classical symptoms of Graves' disease are: a staring appearance of the eyes, generally spoken of as exophthalmos, though there need be no actual protrusion of the eyeballs; moderate and almost symmetrical enlargement of the thyroid gland; a pulse-rate between 120 and 180 per minute—usually about 140 when the attack is moderately severe; and extreme nervousness, with fine tremor of the outstretched fingers. When all these symptoms are present at the same time, there can be little doubt as to the diagnosis, but very often some of them are absent, and it is possible for tachycardia to be the only symptom of the disease. . . . ."(2) ". . . There are three prominent symptoms: protrusion of the eyeballs, enlargement of the thyroid gland, and frequent action of the heart."(3) "We are accustomed to recognise three cardinal symptoms in this disease —namely, (1) tachycardia, (2) goitre, and (3) exophthalmos; but we must remember that these are not the only symptoms."(4)

These definitions represent the general views which have been held on the nature of the disease, and on the most constant symptoms.

The condition was first recognised by the celebrated Dublin physician whose name it now bears, about the year 1835, although v. Basedow in 1840 published a paper on the subject. Consequently, the disease is in Germany and some other parts of the Continent still referred to as "Basedowsche Krankheit," or "Von Basedow's disease." However, as early as 1825, Caleb Parry, of Bath, drew attention to the condition, and, according to Osler, to him belongs the credit of first describing the disease. Many of the early conceptions of the malady have, in the fulness of time, given place to views which have been promulgated from the results of the extensive practical physiological research which has been undertaken in order to establish the causation of the disease. But it was recognised then, and it is believed now, that emotional strain can precipitate the disease. Thus, Trousseau refers to a lady who was suffering great grief at the death of her father, and had been crying for a long time, "suddenly felt her eyes swell and lift up her eyelids"; this was accompanied by copious epistaxis, violent palpitation, and throbbing and enlargement of the thyroid. A few days later the nature of the disease was recognised. Again, Stokes describes the case of a man who developed the disease from long-continued bleeding from piles; and many other records show that the ætiology of the disease was universally regarded as a wide one.

From the early thirties of the last century the nature of the condition was recognised, but it is only comparatively recently that the diagnosis has been narrowed. Thus, it will be seen from the definitions quoted above, that it is not necessary, as used to be thought, for all the classical symptoms to be present in any given case. Nevertheless, there is one symptom without which, as Mackenzie rightly insists, the condition cannot be diagnosed, and that is persistent tachycardia.

So we come down to this: that exophthalmic goitre may, and in the opinion of many observers does, exist without the exophthalmic symptom. It is, therefore, somewhat unfortunate that the name of the disease should be inseparably connected with a symptom which is by no means constant. But we cannot, at the moment at any rate, suggest any other name which is free from objection. As we shall see later, the modern nomenclature which is sometimes used—namely, "hyperthyroidism," is open to an equally serious objection, as it implies that there is always an overaction of the gland, and that it is this overaction alone which is responsible for the features of the disease, of which we must reckon proptosis, when present, as one. Again, it has been pointed out by one observer that this latter symptom is significant of overaction, not of the thyroid, but of the adrenals.(5) Therefore, hyperthyroidism is a no more suitable label for the disease than is exophthalmic goitre. Although there seems to be an objection to utilising the name of the discoverer of a disease to designate that disease (*a*), in the present instance it would seem, for the moment at any rate, to be the most satisfactory way to designate this malady. "Graves' disease" has the merit of being non-committal as to symptoms, and less unwieldy than many of the other names by which the disease has been known.

In the majority of text-books, the malady under discussion is referred to as "exophthalmic goitre" in contradistinction to ordinary goitre. When the swelling in the neck, if present, is accompanied by the other well-recognised signs of Graves' disease, such as persistent tachycardia, exophthalmos, tremor, and other symptoms and signs to be described anon, then we diagnose the presence of this disease as opposed to simple goitre.

Graves' disease, as we shall call this malady in this article, is seen more commonly in the female sex than in the male, and more commonly in young people than in elderly. It has been seen, however, in an infant only 2½ years of age; and several cases are on record of the disease occurring in children of both sexes. Von Graefe stated that the proportion of females to males was six to one; while Eulenburg said that the ratio was at least two to one. Trousseau's cases show a ratio of fifty to eight, Henoch's twenty-three to four, and Präel's twenty-eight to one. Whatever figures we study, there is plainly a vast preponderance of females over males. The commonest time for the disease to develop is in the decades 20-40, and its features are often made manifest at critical times in the history of the patient, such as puberty, the catamenia, and the menopause. Indeed, it is said that in normal persons of the female sex, the thyroid is liable to

(*a*) It may be affirmed that this mode of naming a disease after its discoverer is to be deprecated, partly on account of the difference of opinion as to whom the credit of the discovery really belongs to, and partly because it is perhaps an unfortunate reward for the happy pioneer in the particular disease. Again, if a disease is discovered more or less synchronously by different observers in different countries, a nomenclature is adopted which varies with the different countries, and this all leads to confusion. If a disease is called by its most distinctive feature, this will probably be similar in different languages, so where such a course is possible, it is certainly to be preferred.

swell and to exhibit increased vascularity at these times, and during sexual excitement.

As we have already indicated, there can be little doubt that, certainly in individuals prone to the disease (by this I mean persons who exhibit signs indicative of thyroid instability), a mental strain or a sudden anxiety seems to be capable of precipitating the disease. Again, there is a sufficiency of evidence to show that a parenchymatous goitre can develop into an exophthalmic goitre, given suitable opportunities. The symptom-complex which is produced by thyroid feeding on a large scale differs in many details from the symptom-complex of this disease, so, as Biedl says, we must regard the similarity of the two pictures not as conclusive evidence that the thyroid is the organ responsible for the disease, but as very strong presumptive evidence.

When we come to study the symptoms of Graves' disease, we see three or four definite and fairly constant features, and a multitude of smaller and somewhat vaguer signs. There can be little doubt that tachycardia deserves the first mention, as it is very constant and may be looked upon as a fundamental sign of this disease. Indeed, it is one of the symptoms which can always be produced by the ingestion of thyroid extract; and there must be very few cases of undoubted exophthalmic goitre which do not show this sign. The pulse is usually rapid, ranging from 100 to 140 or more per minute. The pulse-wave is not always thin; indeed, in many cases a full and bounding pulse is observed. Again, it is usually regular, but the rate increases upon very slight exertion.

In this connection, it is interesting to refer to the theory which Eppinger and Hess brought forward. They consider that the symptoms seen in Graves' disease enable us to divide these cases into two groups. In the first, the symptoms of sympathetic excitement predominate, and these they describe as sympathetico-tonic; while the second group is described as vago-tonic, from the fact that the symptoms seem to proceed from disorganisation of the autonomous system. "Falta, Eppinger, and Rudinger assume a polyvalency of the thyroid secretion, and they regard the hyperthyroidism of Graves' disease as the outcome of a simultaneous though probably independent stimulation of both the sympathetic and autonomous nervous systems."(6)

There seems to be little doubt that tachycardia is only one of the many symptoms seen in this disorder which can be justly attributed to the sympathetic nervous system. We shall refer to these later.

The symptom which merits consideration next is the local enlargement of the thyroid gland. Although not so constant as tachycardia, it is nevertheless present in the majority of cases of this disease. The thyroid is generally moderately enlarged, the right side being perhaps more so than the left. In some cases, however, the enlargement is scarcely perceptible, while on the other hand it may be very great. In the early stages the gland is soft and elastic from vascular engorgement, but later it becomes harder from fibrous hyperplasia.

Histologically, the gland presents a picture of diffuse enlargement, with a great increase in the vascular supply. There is definite new formation of tissue, which runs hand in hand with certain retrogressive processes, notably cell desquamation. Young follicles are seen associated with older cells, and in the latter may be seen breaking-down processes. As a rule a thrill can be detected, certainly in the larger tumours, and as the disease progresses, the thyroid may alter in size, diminishing in favourable cases. It is said that in some ways the thyroid enlargement in Graves' disease is characteristic; and Erdheim maintains that the young cell formations with fat granules are characteristic of Graves' disease.

For a long time the proptosis was looked upon as an essential feature of this disease, and it is only recently that we have come to realise that it is by no means always present. Its origin, or rather the changes which underlie the exophthalmos, are still unknown. It has been suggested that the proptosis is due to a deposit of fat behind the eyeballs; to a venous congestion in the posterior part of the orbit; to dilatation of the retro-bulbar arteries; or to contraction of Müller's muscle. It is pointed out that the sympathetic system is largely connected with the symptoms of this disease, and that a disorganisation of this system will account for many, indeed for most of the features, always excepting the changes in the gland itself. On this theory it is much more probable that the proptosis is due to circulatory changes than to either a contraction of Müller's muscle or to a deposit of fat in the orbit.

There are certain classical signs which one is accustomed to look for in association with the exophthalmos, and we must briefly refer to these. The widening of the palpebral fissure gives an appearance of great protrusion to the eyeball, and this is partly due to the retraction of the upper lid. This is known as Stellwag's sign. Although the eyeball in many cases appears to be prominent, it is in reality less so than it appears, on account of the uncovering of the eyeball due to the retraction of the upper lid. There is also a diminution of the reflex excitability of the eye, so that there is less irritation of the globe than would otherwise be the case. Another sign in connection with the lid is known as Von Graefe's sign, and consists in a lagging of the upper lid behind the globe during the downward descent of the eye.

Sometimes there is an insufficiency of the internal recti muscles of the eye, as a result of which convergence of the eyes in near vision is imperfect (Möbius). Occasionally blepharoclonus is present.

Tremor is another constant sign of Graves' disease, and is quite characteristic. It is usually very fine, and confined to the hands, although occasionally it is seen in the muscles of the trunk, so that by laying a hand on the shoulder or trunk the observer can feel a quiver of the whole body. (Oppenheim.) The tremor of this disease is usually excited by movement or by nervousness, but is also present during rest. The rate of movement is somewhere about nine per second, and can best be seen when the patient extends the hands with the palms downwards.

Before turning to the discussion of the mental changes present in Graves' disease, there remain a few less constant symptoms and signs which we have to mention. These may be classed under the headings: vasomotor, secretory, and trophic. The subject of Graves' disease is very liable to suffer from profuse perspiration—indeed, in some cases this amounts to a definite hyperidrosis. As we stated in a previous article, these patients feel the heat greatly, and naturally this symptom is worse in hot weather. The sweating may be more or less local, or it may be general. One point of interest in this connection is with regard to the electrical resistance of the skin in cases of Graves' disease. Vigoroux first discovered that in patients suffering from exophthalmic goitre the electric resistance of the skin was diminished. This is now generally believed to be due to the undue moisture of the skin owing to the increased sweating.

Flushing of the skin, quite irregular in distribution, erythemata of a patchy nature, pigmentation

—particularly of the margins of the lids of the eyes, and sometimes as marked as that seen in Addison's disease — are all phenomena of this condition. As is well known, there is a tendency to loose evacuations of the bowels, sometimes of actual diarrhœa; while the secretion of urine is also increased. The digestive system is often upset, and attacks of sickness, with bulimia or, alternatively, loss of appetite, are about equally common.

The reflexes are often altered; more usually increased, although they may be diminished, or even in rare cases absent.

Cases are occasionally encountered in which the symptoms present a strange combination of those seen in exophthalmic goitre and those characteristic of thyroid deficiency. Thus, patches of lipomatosis are met with in a typical case of Graves' disease; while occasionally the condition of the skin approximates much more nearly to that typical of sub-myxœdema. Leonard Williams believes that there is often, if not always, a combination of excess and deficiency in this disease. Again, some of the symptoms which we are accustomed to regard as indicative of disease in the chromaffin system, such as pigmentation, would suggest the presence of a combination of thyroid and adrenal disturbance.

But as important, or nearly as important, as the physical symptoms of this complaint, is the mental change which characterises exophthalmic goitre. The main features of the sufferer from this disease are well known, but perhaps a brief sketch of the mental make-up of the patient may be useful. Whatever is the agent at work in these cases, whether the disturbance is originally in the sympathetic system, or to be attributed to an excess of thyroid secretion due to a cause or causes unknown, it is one fraught with evil for the peace of mind both of the patient and her relatives. From being gentle and docile, it may be, she changes to an intractable, selfish, restless, and inconsiderate being. The medical attendant as a rule receives the full benefit of this, and little he can do is right. He is either old-fashioned when he explains that the reason for rest in bed, for example, is to avoid straining an already weakened heart; or an ignoramus if he insists that rest combined with hygienic principles offers the best hope for alleviating the disease. If he suggests trying a new remedy he is experimenting with her; if he persists with the old he is a "stick-in-the-mud."

Perhaps the saddest of the changes wrought by this disease are the changes for the worse in the psyche, and it behoves the medical man to be very tactful with such patients and to remember that the mind is the victim of a disordered bodily functioning, and is no more to blame for its vagaries than the victim of, let us say, puerperal mania.

The mental symptoms are, like the physical, capable of entirely clearing up; but even so, Leonard Williams doubts whether the individual is ever quite the same again. There can be little doubt that this disease plays havoc with the patient's character. It changes the quiet to the restless, the unselfish to the self-centred, and the amiable to the perverse. That these patients are notoriously difficult to treat is well known; that they make the treatment of their condition doubly difficult by their attitude to what is being done for them is almost equally well realised by everyone connected with the case except the patient herself.

Apart from the changes in character which we have outlined, more serious symptoms are seen in connection with Graves' disease. Apart from actual insanity, such as melancholia, mania, hallucinatory confusion, and obsessions, there are the minor changes which are apt to lead to these more serious psychoses. Thus the patient is excitable, wildly restless, sleepless, and confused. She is incapable of organised thought, of successful memory, or of attentive control; while her general mental habits have been well spoken of by Reynolds as "mental chorea." It is quite obvious that it is but a short step from this stage to that of insanity.

Needless to say, fortunately only a relatively small percentage passes from the mentality characteristic of Graves' disease to that typical of insanity. Nevertheless, the picture we have drawn of the mental condition of these sufferers is not exaggerated. It is true that in many diseases which the physician is called upon to treat to-day, the patient's worst enemy is himself; and in no disease is this more true than in exophthalmic goitre. Consequently, it is no rare occurrence for such a patient to pass from one doctor to another, giving no one a fair chance to benefit the malady. This is the analogue in the mental apparatus of the restlessness in the physical system which prohibits the patient from resting, which is the one thing most to be desired. Thus is his temperament at the time his worst enemy, and it is this which needs treatment quite as much as the syndrome of symptoms which we have been discussing.

Such, then, is the bare outline of what constitutes Graves' disease. What is the prognosis, and what can we do to benefit that part of suffering humanity afflicted with Graves' disease?

First, as to prognosis. The course of the disease is very variable: it may, in rare cases, be rapidly fatal, or it may linger for many years, sometimes showing improvement, at other times retrogressing. Mackenzie gives the mortality at approximately 25 per cent. In patients who eventually recover, there is often a period when no improvement seems to take place, and the disease seems to be stationary. Even in these cases there is a prolonged convalescence, and sometimes years afterwards some slight trace of the disturbance can be found.

In the early stages, the malady is very liable to be diagnosed wrongly, some such diagnosis as neurasthenia being made. This probably partly accounts for the advances which this disease makes in early stages, owing to a misconception of the nature of the trouble. Also, the prognosis must be based upon the length of duration of the disease, the prominence of individual symptoms, the means of the patient, and, last but by no means least, the degree of mental abnormality which exists.

But, speaking generally, patients who have had the disease for a long time, especially where treatment has been of little avail, are not the most hopeful of subjects, and there seems little reason upon which to base hopes of complete recovery. Indeed, in such cases as these, it is doubtful whether they are ever entirely restored to the *status quo ante*. Although it is usual to see amelioration of the symptoms, even a vanishing of the proptosis, or at least a diminution of the amount of protrusion under successful treatment, such patients are extremely liable to a relapse. Their nervous symptoms recur from time to time; indeed, it would seem that it is very difficult for them to return to the successful functioning of this system once Graves' disease has developed.

There have, however, been many reports of recovery of long duration. Cheadle reports recovery lasting twenty years; while Oppenheim says that in one case of his recovery lasted "for twenty-seven years, in another for eighteen, in four for six to eight years."(7) The chief difficulty lies in keeping up the faith of the patients, in exacting obedience, and in counteracting individual symptoms.

Sudden death has taken place during the course of this disease, and when we remember the strain

upon the circulation, the dilatation of the heart and the disorganisation of the neuro-musculature of this organ, it is not to be wondered at. Occasionally, as a sequel to this malady, atrophy of the thyroid may take place, with resulting myxœdema.

We shall have to refer at some length to the treatment of this malady, for it necessitates a discussion of methods which have been utilised for many years, as well as those which have found favour recently. Modern physiological research has enlightened us upon many points in this connection, and some of these have pointed to different methods of treatment, a few of which, at any rate, have shown signs of success.

But whatever treatments we may initiate, whether we incline to the old practice of counteracting the symptoms by controlling the exuberance of the heart's action, by producing adequate sleep, by anointing the thyroid gland, or by countless other small attentions, one factor remains constant, and that is the insistence upon sufficient rest, even complete rest in bed in bad cases. The application of the principles of general hygiene cannot be insisted upon too firmly, for this should be the bed-rock upon which all subsequent treatment is based. The difficulty is that the restlessness which these patients so often exhibit makes this stipulation a difficult matter to enforce. Nevertheless, it is not so much a matter of the practice of medicine as of the practice of common sense which suggests this; for it must be obvious that exertion, particularly undue exertion, which is always followed, as it is in this disease, by an increase in the symptoms, must be wrong, and therefore in no circumstances to be considered. When tachycardia is present, as it invariably is, our first aim must be to reduce the work of the heart to a minimum, and in doing this to reduce the tachycardia. Even if the rate of the heart's action is not excessive, the patient must be made to take periodic rests in the course of the day. She should rise late and retire to bed early, resting after meals, and avoiding hurry and perturbation. Where tachycardia is a marked feature, and more especially where the signs of general debility with marked loss of flesh are evident, complete rest in bed is essential.

There can be little doubt, moreover, that these patients require every hygienic advantage which can be given them. Thus, where possible, they should reside in the country or by the sea, but not in too bracing a place. They should rest in the open air, lie in the sun for the greater part of the day, and attempt no exercise of a strenuous nature. I have on several occasions had occasion to emphasise the harmful effects which absence of rest has produced; but it is often extremely difficult to make the patient understand this. Again, the diet must be regulated to the individual case, and with some thought to the nature of the disease. Thus, we must bear in mind what underlies this malady, especially what has been discovered in recent years. Firstly, the condition of the gastro-intestinal tract must be considered: if the digestion is good, and there is little tendency to diarrhœa, vegetables may be permitted, but this item of diet must remain under the control of the medical attendant.

Again, in this connection we should bear in mind another important fact—namely, that iodine is excessive in the colloid in Graves' disease, and is also contained in most vegetables. Therefore, we do not want to add to the amount already present in the body. In this connection Rendle Short says: "We see also that exophthalmic goitre is due to hypersecretion of the iodothyrin, as is proved by the artificial imitation of the disease by excessive thyroid feeding, by the excess of iodine present in the colloid in Graves' disease, and by the character of the histological changes. Thus we have reason to expect good from partial removal, which has been very successful in the hands of Kocher, the Mayos, and others. It would be reasonable also to try the effect of iodine starvation by eliminating vegetables and ordinary tap-water from the dietary, and substituting for the latter the water of a goitre well. It is well known that exophthalmic goitre and parenchymatous goitre show a sort of geographical antagonism, and the effect of the water in reducing the amount of iodine for conversion into iodothyrin would be valuable."(8)

It must be borne in mind that parenchymatous goitre is supposed to occur owing to a deficiency of the iodothyrin, so that the thyroid hypertrophies in an endeavour to supply that deficiency. If, therefore, there is too little of this element in the thyroid of sufferers from parenchymatous goitres, they may be helped by the ingestion of vegetables. The water of the well-known goitre wells is supposed to produce parenchymatous goitres by containing a substance which deprives the body of the iodine by forming a combination with it. In an effort to counterbalance the diminished output of iodine the gland hypertrophies. On this assumption, then, it is recommended to try the water on patients suffering from exophthalmic goitre, in the hope that the unknown substance in the water will utilise some of the excessive secretion of the thyroid.

Turning now from the consideration of the general treatment of this disease, we find a host of other remedies which have from time to time been recommended. Apart from symptomatic remedies, over the consideration of which we shall spend but little time, we have before us a choice of many drugs, both for internal and external application. Of these, preference seems to lie with belladonna, aspirin, the salicylates, arsenic, and iron salts (where indicated). As we have already said, Graves' disease is often associated with anæmia, and therefore some benefit may be expected by the administration of these latter salts.

Of cardiac tonics, some authorities prefer strophanthus, while others recommend digitalis and nux vomica. But the help which the physician may expect from these drugs is strictly limited to their local action upon tachycardia.

Leonard Williams has reported good results in several cases from the hypodermic or intramuscular injection of bile salts. The *rationale* of this treatment lies in the fact that it is well known that these salts circulating in the blood produce a sedative effect on the brain and a slowing of the pulse.

Of recent years, more and more stress has been laid on the chance of finding an organo-therapeutic compound which will help to neutralise the excessive action of the thyroid. Extracts of the adrenals have been tried, as also the extracts of pituitary, the ovaries, the parathyroids, and the spleen. Unfortunately, these have not given good results, only the parathyroid holding out any hope in this direction.

But there remain several external remedies to mention, some of which have been stated to give really good results in some cases. Of these, the X-rays is very well spoken of when applied to the exterior of the gland, and it has been said on many occasions to have limited the exuberant activity of the thyroid. Again, galvanism and faradism, applied either to the gland itself or to the sympathetic in the neck, has been tried, sometimes with success. Or, a compress of adrenalin applied to the goitre is a help in some cases. I have had good results in some patients from the application of a mercury ointment to the thyroid. A small portion rubbed in every night, associated with other internal

treatment, has on more than one occasion resulted in an amelioration of the symptoms.

Again, since 1884, preparations have been manufactured from thyroidectomised animals. Of these the more important are "antithyroidin" (Moebius), "hæmato-éthyroidine," and "thyroidectin." Beebe has evolved a method of treating Graves' disease by an antiserum produced by the inoculation of a thyroid preparation in animals.(9)

It is too soon to speak of the results of this latter treatment, but its value is said to have been proved in a large number of cases.

In conclusion, we must emphasise the fact that, of all diseases which the medical man is called upon to treat, probably no one makes such calls on his perseverance and patience. For he has to treat an irresponsible patient, and one who is not the best judge of her condition. He requires infinite tact and an everlasting patience, if he is to see the fruits of his labours. Furthermore, he must perforce try any remedies which hold out a chance of help, and he must discriminate nicely between those which are logically futile, and those which are based upon reason.

There is some ground for hoping that in the near future, as our knowledge of the disease and its causation widens, we shall evolve a more satisfactory mode of treatment. For the present, we must make up by our resourcefulness what we lack in our nicety of knowledge.

(The next article in this series deals with "Thyroid Deficiency." The previous articles in this series appeared in the MEDICAL PRESS AND CIRCULAR on May 24th and June 7th.)

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(5) Maurice. *Lyon Medical*. Quoted by Leonard Williams in *Practitioner*, January, 1915. p. 96.
(6) "The Internal Secretory Organs." By Biedl. p. 98.
(7) Oppenheim. "Text-book of Nervous Diseases." p. 1319.
(8) "The Newer Physiology in Surgical and General Practice." By A. Rendle Short. pp. 85-86.
(9) The Diseases of the Ductless Glands, for Practitioners of Medicine and Surgery." By S. P. Beebe.

A NOTE ON LEISHMAN'S BODIES: PERNICIOUS ANÆMIA: CANCER.

By JOHN FURSE McMILLAN, L.R.C.P.Lond., M.R.C.S.Eng., L.S.A.,
Late R.A.M.C.

WHILST engaged in the study of sleeping sickness and trypanosoma in one of the standard text-books on Bacteriology (*a*), the writer was struck by an illustration of those adventitious bodies or individuals which are to be found in microscopic examination of the blood of those suffering from certain diseases peculiar to the West Coast of Africa, Palestine, Mesopotamia, Egypt, and the Military Cantonment of Calcutta—Dum Dum, with perhaps other localities.

In 1882 the writer was House Physician to Dr. Coupland at the Middlesex Hospital, and as the latter was engaged in the investigation of the hæmic changes in anæmia, it fell to his duty to prepare certain specimens, from the ordinary case of anæmia peculiar to the housemaid or shopgirl, to those of pernicious anæmia. In the former case there was little to be detected microscopically other than an alteration in the quality of the blood, whereas in the latter were to be seen what would appear to be adventitious bodies, caused by amorphosed rouleaux of red blood corpuscles enclosing disintegrated leucocytes embedded in plastic fibrin—a description that may sound to the modern ear somewhat old-fashioned, but which, considering that the cachexia of pernicious anæmia bears the same relation to the cachexia of cancer as does the cachexia of malarial fever to the so-called Dum Dum fever, renders it obvious that an investigation of cases of pernicious anæmia and a comparison with those of Dum Dum fever and its allied diseases would possibly throw some light not only on the cause of the pernicious forms of anæmia, but also on that of cancer, given that the modern bacteriologist discovers an association between the Leishman bodies of Dum Dum fever and those adventitious bodies that are to be found in cases of pernicious anæmia. At any rate, the very name of cachexia implies blood change with ultimate deterioration, and inasmuch as malaria is due to a specific adventitious organism which brings about this status; whilst Dum Dum fever is due to another and separate organism, also bringing about cachexia, as regards cancer, especially in so far as concerns epithelioma, given a certain condition of the blood either due to the presence of such bodies as Leishman's, which after the manner of the bacilli of yellow fever, may leave the capillaries by a process of osmosis (*a*), and so be undiscernible under the microscope, then here we see how, apart from the ever-present question of heredity, which may be regarded as bearing the same relation to the bacteriological question as does the family history to the physical evidence of a case, the cell proliferation of cancer may occur; which, whether we denominate as cause or effect, in its redundancy is the concomitant of asthenic death.

Then, in so far as concerns cancer, it may be that heretofore we have mistaken cause for effect—that is to say, an examination of the blood of a cachectic, *in initio*, may reveal to the bacteriologist the cause, before osmosis has occurred, in that position of the body constituting a nidus. For we know that the lymphatics are *not* the primary site of the growth of cancer; but that the nidus will occur where there be some exciting cause, such as a sore on the lip in the case of epithelioma, excoriation of the nipple as to scirrhus of the breast, and erosive indigestion as to scirrhus of the pylorus; whilst sarcoma is for the most part concerned with the sexual functions of women, such as, in whom, may occur anæmia.

So that on the first appearance of a cancer, it would appear well for the bacteriologist to examine the capillaries in the region of the commencing growth with a view to the discovery of bodies allied to those of Leishman.

(*a*) Muir and Ritchie.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

MEDICAL LAW REFORM.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—My last letter was occupied with the opening of an account of what I defined as the attempt that was made in 1858 to provide the profession with a complete legal constitution; I gave an account of the magnificent work carried out by the General Medical Council under the Act of 1858 in improving by education and examination the personal and professional qualities of the medical man, and I deplored the complete lack of political power possessed by this great profession. This lack of power has been mainly due to the default of the British Medical Association. It has included a membership of sometimes over 20,000, and it has

from first to last entirely failed in one of its prime duties—namely, that of gathering in and voicing the opinions of this vast body. It is my belief that if the Association had brought to bear the great latent power it contained, complete reform of medical law, including the control of quack medicines, might have been brought about many years ago. At this moment the profession, as a mass, has no political power in any direction in which it is entitled to it, and is either ignored or even treated with contempt by statesmen and the Legislature.

After the control of education, the next function of the General Medical Council is registration. Registration is not compulsory; but an unregistered man cannot occupy any post under Government, and cannot recover fees by process of law. The Council can take cognisance of disgraceful conduct on the part of any legally qualified man. It can hale before it a practitioner charged with an offence, and can admonish him, suspend him, or strike his name off the Register if convicted of infamous conduct. Having struck off the name, the Council has no power whatever over the offender. He can go on practising the profession; he can adopt bogus titles; he can add to his name the degrees he possesses, merely adding the prefix ex—as, for example, ex-M.R.C.S., L.R.C.P., and he can with impunity use language in his advertisements clearly implying that he still remains a legally qualified medical man. The Council has no power whatever to interfere with unqualified practitioners, nor to prosecute quacks assuming titles who possess no diploma. The preamble of the Act of 1858 contains the declaration that it is intended to enable the public to distinguish between qualified and unqualified practitioners. This, of course, implied the prevention of the assumption of titles by unregistered persons, and punishment was prescribed for offenders. It was not long after the passing of the Act that magistrates began to hesitate in imposing fines under the Act, and after a long series of cases of various kinds which were passed to the higher Courts and the House of Lords, it was found that the penal clauses intended for the protection of the public could not be enforced. This deplorable fact was announced by the President at an opening of a session of the Medical Council a few years ago. Many swindlers using the title "Dr." have passed before the public view within late years without interference from medical law, and there still remain great numbers of fraudulent quacks who, if they do not actually use medical titles, employ in their advertisements language calculated to make even educated people look upon them as *bona fide* medical men. In passing, I should like to mention that a similar weakness has been displayed in the Dentists Act. An unqualified man may not assume the title dentist, surgeon-dentist, or dental surgeon, but he may use the words dental surgery or dentistry in his advertisements and on his signs, and deceive the public into the belief that he is a registered dentist. The latest attempt at protective legislation of this kind, the Veterinary Act, has broken down more or less completely in a similar fashion. That the defects in the Medical Act of 1858 might be easily remedied is evident. The law which governs the profession of solicitors is completely effective. The Law Society has ample power to enforce the most rigid discipline on registered men. It has power to prosecute any person even remotely pretending to qualification. Persons not on the Rolls practising as solicitors are not to be found, and any man of business who should write a letter suggesting even faintly that he was a solicitor makes himself liable to punishment. The law is clear; magistrates never hesitate to convict, and no case has for years been taken to the Higher Courts. What has been done for the solicitors can evidently be done for the doctors. Moreover, the protection of the public against imposture has been provided in at least one of our Dominions. An illustrative case within the last year or so is to be found in the Law Reports. The Transvaal Ordinances forbid the practice of any department of medicine or surgery to unqualified men. An offender was convicted and fined by a Court of Summary Jurisdiction. He carried his case through all the Higher Courts up to the Supreme Court of South Africa. These Courts all confirmed the judgment of the magistrates. Not content, the applicant came to England and brought his case before the House of Lords. The supreme tribunal upheld the decisions of the Courts below. The elaborate judgment of the Lords is to be found in the Law Reports. It showed the unequivocal character—the unmistakable plain English—of the Transvaal Ordinances. It is surely not beyond the power of British Parliamentary draughtsmen, perhaps with the help of the General Medical Council, to amend faulty clauses of the Act of 1858, and there cannot be the least doubt that if the evils that have been continued for so many years through the weakness of the Act of 1858 had been put forcibly before the Legislature the proper remedies would have been long ago applied. The British Medical Association has been all along the only body capable of pressing upon the Legislature the necessity for medical law reform, and if it has tried it has entirely failed to obtain a hearing from statesmen or from Parliament.

I have not yet concluded my argument, but must once more stop in consideration of your space.

I am, Sir, yours truly,

The Old Rosery, Henry Sewill.
Earlswood Common.
June 8th, 1916.

THE PROGNOSTIC SIGNIFICANCE OF A COPIOUS RASH IN TYPHOID AND SIMILAR INFECTIONS.

To the Editor of The Medical Press and Circular.

Sir,—I have read with much interest and pleasure the article by Professor Gougerot in the Medical Press and Circular of June 7th. I have for years held that the defensive reaction as shown by eruptions on the skin has not received the attention it deserves. I am convinced that dermatologists are in a great measure to blame for this; they have for ages worked from without in, instead of from within out, as they ought. By means of ointments and lotions they calm the reaction in the skin, and so "drive in" the germs and toxins, One of their pet arguments is that a healthy skin acts better than a diseased one. So it does; but they seem to forget than in nine so-called skin diseases out of ten the whole body is diseased, and the organism has created open doors in the skin through which germs and toxins may be driven out away from the brain, spinal cord, heart, lungs. etc. I believe it is a matter of common observation that locomotor ataxy has never been seen in a syphilitic patient who has developed pronounced cutaneous eruptions. Why, then, should these open doors be closed? I could many a tale unfold in this connection if I chose, but this is scarcely the time to do so. Also, Lister played a great part in stamping out the fine old remedies, such as the blister followed by savin ointment, the "crisis" as used with magnificent success by hydropathists, the production of pustules by means of croton oil or other irritant. He so marked associated pus with "sepsis" that the modern medical man looks on pus as an utter abomination under any circumstances. A seton will set up an active discharge of pus, even if put in with every

aseptic precaution and covered with sterile dressings. There are many significant statements in Dr. Gougerot's article. For instance: (1) "I think, too, that in all probability the skin not only fixes the toxins, but burns them up." Dr. Gougerot mentions the skin only, but what about the subcutaneous tissue? There are millions of people alive to-day who owe their continued existence here to the fact that the subcutaneous tissue is capable of accommodating and fixing an enormous amount of toxic material.

There surely are few medical men who have not seen the enormous relief to patients that follows the free scarification of œdematous legs and other parts. Most of them look on it as largely mechanical, but to my mind the relief is due to extrusion of germs and toxins through the slits in the skin.

(2) "If the activity of the skin be artificially stimulated by mustard baths or what not, the cutaneous defence again comes into action, as shown by the appearance of the eruption, the poisons are burnt up, and the disease assumes a less grave aspect."

Here Dr. Gougerot shows the timidity that so largely characterises leaders of thought in medical circles. He merely mentions mustard. Why not croton oil or cantharides when the lives of valuable, sorely-needed men are at stake? The risk is infinitesimal if these grand drugs are skilfully used, the possibility of cure as the result of employing them is great. I never hesitate to use them freely myself in any condition, from broncho-pneumonia in an infant to arthritis deformans in an aged patient.

(3) "Each pink spot is due to a small microbial embolus of living or dead microbes, *conveyed thither by the blood*." Here is a bold statement of the fact that the blood is able to *carry* germs and toxins to the skin. In other words it actively sets to work to remove germs and toxins from vital organs to the the skin, or, as I prefer to put it, the skin and subcutaneous tissues.

There is one paragraph in the article which is not very clear to me, and I should be grateful to you, Sir, or any of your readers, for enlightenment.

"Defective resistance on the part of the organism is the principal cause of the ill-defined or 'gone in' eruptions, but it seems possible that other causes may hinder the cutaneous reaction, as, for instance, the existence of a visceral inflammation (inflammation of the lungs, for example), thus preventing destruction of poisons in the skin and rendering the disease *pro tanto* graver."

I should very much like to comment still further on this valuable article, and give examples of the really excellent and gratifying results I have obtained by setting up reactions in the skin and subcutaneous tissues by means of croton oil and cantharides, but I am afraid my letter is already too long. I therefore merely ask leave to point to articles I have published. (*a*).

I am, Sir, yours truly,

W. J. MIDELTON.

112 Charminster Road,
Bournemouth.
June 9th, 1916.

THE MEDICAL DEFENCE UNION.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Let me remind Dr. Dennis Vinrace of the saying of Eurypides that "Silence is an answer to a wise man." As he refers to our correspondence during September and October, 1915, I may point out that in a letter which I wrote, and which appeared in your columns on September 22nd, 1915, I concluded with the statement, "I shall not trouble you with further correspondence on this subject." There the matter ended so far as I am concerned, and I have not the least intention of taking it up again.

I am, Sir, yours truly,

S. J. Ross.

Monkhams, Bedford.
June 7th, 1916.

(*a*) *Lancet*, 1907; *Practitioner*, January, 1912; MEDICAL PRESS AND CIRCULAR, May 8th, 1912, and October 15th, 1913; *British Medical Journal*, 1913.

TRANSACTIONS OF SOCIETIES.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF PATHOLOGY.

MEETING HELD FRIDAY, MARCH 31, 1916.

The President, E. J. McWEENEY, M.D., F.R.C.P.I., in the Chair.

REMARKS ON THE VALUE OF CHINA GREEN FOR THE ISOLATION OF TYPHOID BACILLI FROM THE FÆCES.

A paper on this subject was read by the President, who began by referring to the increased importance of the search for typhoid bacilli in fæces not so much for diagnostic purpose as with the object of discovering bacillus carriers, whose presence was a source of danger. An American worker, Churchman, had ascertained the curious fact that the addition of gentian violet to nutrient agar in the proportion of about 1:100,000 had, roughly speaking, the effect of stopping the growth of Gram-positive organisms, whilst the Gram-negative species developed. Krumwiede and Pratt found that several green colouring matters in certain concentrations checked the growth of coli while permitting that of typhoid. Browning, Gilmore, and Mackie found that brilliant green in peptone water powerfully suppressed the growth of coli whilst that of typhoid took place. So far back as 1909, he (the speaker) had commenced experimenting with China green, and had obtained favourable results, which he had laid before the British Medical Association at Belfast. He now reported the results of further experiments. The dye must be used in two ways, first as an addition to agar for direct plating, and secondly, added to broth or peptone water as a preliminary enrichment medium before plating out. He had found that the addition of about 3.5 c.c. of 1/1,000 solution per 100 c.c. 3 per cent. agar kept back the growth of most of the coli, whilst it allowed typhoid to grow. The stain, however, showed a tendency to inhibit the growth of typhoid whilst encouraging that of the para-typhoid group. The preliminary culture in peptone water containing 0.3 c.c. of a 1/1,000 solution also tended to depress the coli whilst allowing typhoid to grow. But so far he had not succeeded in obtaining results so satisfactory as those recorded by Browning with brilliant green. In his (the speaker's) opinion much depended on the amount of organic matter present. When the bacilli were added in a medium rich in organic matter (such as fæces) the dye exercised a much less depressing influence on microbic growth generally than when they were added in broth cultures. It was not always easy to form correct conclusions at once as to the typhoidal nature of the colonies appearing on plates containing the colouring matter, as colonies that at first resembled typhoid proved subsequently not to be of that nature. Sub-

cultures to restore motility, sugar and serum tests had to be made. Although he had not yet succeeded in obtaining perfectly satisfactory results from the use of China green, either in plates or as an enrichment method, he thought the outlook sufficiently favourable to justify him in continuing his work on the subject.

Dr. R. J. ROWLETTE said that prior to the war, Widal's reaction was regarded as the reliable diagnostic test, but with the introduction of inoculation the examination of the fæces has become much more important. He asked, was China green a suitable medium for the examination of the urine?

Dr. W. D. O'KELLY said his objection to the China green method with solid media was that there was not a sharp enough contrast between typhoid and coli colonies. He considered the green dyes were useful in enriching the typhoid in fluid media when subsequent subcultures on a differentiating medium like Endo was used. He also considered that the individual typhoid strains differed, often markedly, in their action with the same dye; this was noticeable in the marked favouritism of China green to the paratyphoid bacilli. He had met one strain of typhoid which seemed to assume lactose fermenting properties although subcultured from an originally genuine non-lactose fermenting colony.

Dr. T. T. O'FARRELL said he had recently cause to realise the importance of a good method for examination of fæces, as he had found high agglutinating power against *B. typhosus*, *B. paratyphosus A.* and *B.* in the sera of soldiers who had received the mixed vaccine.

Dr. W. BOXWELL favoured the treatment of comparatively large volumes of fæces with brilliant green with subsequent plating on Conradi-Drigalski medium. He asked, was China green of any use for the isolation of dysentery bacilli?

The PRESIDENT, in reply, stated with regard to urinary cases he centrifugalised the specimen, and plated the sediment upon Conradi-Drigalski medium. The cultures were often obtained quite pure, so that plain agar was often sufficient without differentiating media. He considered blood culture was of primary importance in all suspected cases of typhoid. He had no experience of China green with dysentery, but Krumwiede and Pratt had found it to be inhibited quite as much as *B. coli*, so that it would not be a suitable medium.

ABDOMINAL TUMOUR.

Drs. R. J. ROWLETTE and W. BOXWELL showed the abdominal viscera from a woman aged 62. She had noticed her abdomen enlarging for three months, but had no pain nor wasting; for three weeks prior to her death she had vomiting and diarrhœa. The viscera showed the omentum occupied by a tumour-mass infiltrating it in every part; it also infiltrated the mesentery and the peritoneum, covering the right lobe of the diaphragm, and there were small implantations elsewhere on the parietal peritoneum. No primary seat of carcinoma could be discovered. There were no secondary deposits elsewhere in the body. *Microscopically* the tumour was found to consist of large flat cells, varying greatly in appearance. Some appeared to be actively phagocytic; in many the nucleus was in process of division; no mitotic figures were seen. There were many giant cells similar to those seen in giant-cell sarcoma, and there were many multinuclear protoplasmic masses resembling syncytial masses. Cell-inclusions were present. The stroma was scanty; lymph spaces were well marked. Much of the tissue of the tumour was necrotic. Where the tumour was in contact with muscle tissue, as on the intestinal wall and the diaphragm, the tumour cells could be seen infiltrating between the muscle bundles. The exhibitors regarded the tumour as an endothelioma originating in her peritoneum.

The PRESIDENT said the case closely resembled the description of endothelioma peritonei given by Aschoff; he considered the nodular appearance, superficial distribution, and the absence of cachexia as characteristic. He had seen a case of the condition in the omentum which formed a belt across the abdominal viscera and superficially had the appearance of a large cancer of the transverse colon, but it had no connection with the lumen of the bowel, and microscopically it was an endothelioma.

Dr. W. D. O'KELLY said he had met primary endothelioma of the ovary with secondary invasion of the peritoneum. To the naked eye the ovary appeared normal, though microscopically endothelioma was readily demonstrable.

Dr. J. H. POLLOCK regarded the giant cells as being in the nature of foreign body giant cells.

Dr. R. J. ROWLETTE said the ovaries appeared normal to the naked eye. He had met a case of primary endothelioma of the ovary with metastases in the peritoneum, but the appearance had no resemblance to that of the specimen shown.

SYPHILITIC SPECIMENS.

Dr. J. H. POLLOCK demonstrated a specimen of syphilitic liver obtained from an infant of eleven months old, who succumbed to an apparently primary hepatitis. Cellular infiltration of a diffuse nature, together with gummatous formations, were present. The histology was typical, and spirochætes were demonstrable by Levaditi's method. He thought it was possibly unusual to see a liver in this precise condition, as such cases usually either died during intra-uterine life or survived sufficiently long for fibrotic changes to occur.

He also showed a specimen of testicular gumma and a preparation of spleen from a macerated fœtus, exhibiting *Spirochæte pallida* in extreme numbers.

SPECIMEN FROM A CASE OF PARATYPHOID (?).

Dr. G. E. NESBITT showed the kidneys and portion of small intestine from a case with puzzling clinical symptoms. The patient, a girl of 15, was admitted to hospital as suffering from nephritis, the urine containing 0.4 per cent. of albumin, and half the normal output of urea. The arteries were distinctly hardened, the aortic second sound accentuated and the blood pressure raised. She complained of occasional abominal pain, for which no satisfactory explanation was apparent. She had no fever. On the tenth day after admission, she had a sudden large hæmorrhage from the bowel. The abdominal pain became acute, and she vomited frequently. As these symptoms persisted for two days without improvement laparotomy was performed. The abdomen was found to be normal, with the exception of the lower end of the ileum, which was studded with hæmorrhagic areas running for the most part in a transverse direction. The appearance was somewhat suggestive of typhoid, and the same day the blood was examined, with a positive reaction, for *B. paratyphosus A.* in dilution 1 : 80. Two days later the child died. A limited autopsy was performed. The abdomen contained pus, due to two small perforations. The lower end of the ileum showed numerous small circular ulcers of various depths. Peyer's patches were not affected, nor were the mesenteric glands or spleen enlarged. The colon and cæcum were free. The left kidney was large and granular, with large adherent

capsule. The right was congenitally small, about the size of a walnut. The clinical history and pathological findings seemed to be opposed to a diagnosis of paratyphoid, but in the absence of complete bacteriological investigation no definite opinion could be expressed.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

MEETING HELD JUNE 2ND, 1916.

The President, DR. LEONARD DOBSON, in the Chair.

DR. J. DUNDAS GRANT read a paper on

SOME POINTS OF PRACTICAL INTEREST IN THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE NOSE, THROAT AND EAR.

Beginning with the subject of nasal affections, the author said that a nasal discharge was sometimes simply due to eczema of the nasal vestibule, owing, in part, to too zealous irrigation with saline solutions. This could be cured by the cessation of irrigation, and by the use of a simple ointment. In acute nasal catarrh the sinuses were frequently involved, and various remedies were suggested. In asthma the condition of the nares should always be examined. For ozæna a very efficient method of cleansing the nose with an alkaline solution was demonstrated. Other methods of treatment were described. One form of nasal obstruction often overlooked was due to collapse of the alæ nasi. As regards throat affections, the fact that persistent hoarseness might be due to carcinoma of the larynx, necessitating immediate operation, was frequently overlooked; whereas pharyngo-mycosis, which generally disappeared spontaneously after some period, shorter or longer, caused early alarm. After discussing the various causes of stridor, dysphagia, regurgitation of food, and hæmorrhage from the mouth, Dr. Dundas Grant passed on to the consideration of vertigo and relaxation of the membrana tympani, and concluded by demonstrating an ingenious method of detecting simulated deafness.

The following skiagrams were shown by Dr. STANLEY MELVILLE:—(1) Cardio-spasm; (2) rabbit-bone (vertebra) in right bronchus (removed by operation); (3) safety-pin in right bronchus (removed by operation); (4) spasm of upper part of œsophagus; (5) irregular left frontal sinus.

OBITUARY.

DR. DUNCAN MENZIES, M.A., M.B., C.M., LONDON.

WE regret to announce the death, on May 28th, of Dr. Duncan Menzies, of Dorset Square, after a motor accident. Dr. Menzies was a native of Perthshire. He studied at Edinburgh University, graduating M.B., C.M., in 1883. Shortly afterwards he came to London, and settled in Marylebone, where he built up a large practice. Dr. Menzies was a sound physician and a straightforward Scotsman. His qualities endeared him to a large circle of friends and patients, by whom he will be sadly missed. He leaves a widow, four sons and one daughter. His eldest son, Dr. James Menzies, holds a commission in the R.A.M.C., and is at present at Salonica. His other three sons are also in the army.

DR. A. E. PALMER, M.R.C.S., L.R.C.P., LOUGHBOROUGH.

THE death took place at Mundesley, Norfolk, on June 4th, of Dr. Arthur Ernest Palmer, aged 49, of Loughborough. The deceased, who was a bachelor, had been ailing for some time from an affection of the throat. He was the second son of Dr. Grimes Palmer, and brother of the late Dr. W. G. Palmer, claiming association with one of the oldest-established medical practices in the district. Educated at the local Grammar School, he proceeded to Guy's Hospital, London, qualifying M.R.C.S., L.R.C.P. in 1889. A subsequent appointment as House Surgeon to the Torquay Hospital preceded his election as House Surgeon at the Loughborough Hospital, where he built up a reputation as an anæsthetist. In 1898 he joined Dr. J. B. Pike in private practice, and was in partnership till his death.

DR. HUGH MACNAUGHT, M.B., CH.B., GATESHEAD.

ON June 3rd, Dr. Hugh MacNaught died suddenly at Gateshead. The deceased gentleman, who was about 32 years of age, came to Gateshead from Glasgow in 1912. He qualified M.B., Ch.B., at Glasgow in 1908.

REVIEWS OF BOOKS.

SURGICAL ANÆSTHESIA. (a)

THE author has considerably improved the appearance of the second edition of his book by increasing the size of the page, and he has thus been able to add some new matter without increasing the number of pages. The key-note of Mr. Gardner's teaching in the previous edition of his work was the necessity of avoiding all trace of asphyxia, or, as he calls it, "anoxæmia" during anæsthesia, and this teaching is insisted on as vigorously as before in the new edition. There can be no doubt that the matter is of the first importance to the anæsthetist, and the author is to be congratulated for his insistence on it. The chief additions now made to the work are a short chapter on anoci-association, and one on intratracheal insufflation anæsthesia. These important subjects are treated in a very brief way, and the student is given little help in deciding how far the methods should be adopted. After a careful study of the book, one is at a loss to know whether the author recommends them or not.

The introductory chapter on the History of Surgical Anæsthesia is almost word for word as it was in the edition of 1909. In the *British Medical Journal* for April 13th, 1912, there was communicated from the Wellcome Historical Medical Exhibition Research a paper describing the life and work of Henry Hill Hickman, a forgotten pioneer of surgical anæsthesia. Hickman's work on carbon dioxide and nitrous oxide gases, published between 1820 and his death, at the age of 29, in 1829, is perhaps the most remarkable work on anæsthesia that preceded the discovery of Wells and Morton. We are surprised not to find Hickman's name or work referred to in Mr. Gardner's book.

We regret to find a good deal of careless writing, since by it the author's meaning is rendered obscure and the reader's attention is distracted from the subject. We take two instances, both of which occur on the same page. "The safest method is to warm the table and bed with bottles before the patient is laid upon them, and then remove them, but to trust entirely to warm blankets during operation, and afterwards in bed, until complete consciousness and sensation are restored." "In the case of nitrous oxide, which is commonly administered in the day clothing, care must be taken that females actually unloosen their corsets, for the author has seen hesitating, irregular breathing, and in two instances complete respiratory cessation, due entirely to tight corsets."

The author adopts a curious plan, and one that we cannot commend, with regard to his references. He refers to the third edititon of Dr. Dudley Buxton's work, published in 1900, though he might equally well

(a) "A Manual of Surgical Anæsthesia." By Bellamy Gardner, M.R.C.S.Eng., L.R.C.P.Lond., Honorary Anæsthetist to the King George Hospital. 8vo, pp. 232. Second edition. London: Bailliere, Tindall and Cox. 1916. Price 7s. 6d.

have referred to the fifth edition, published in 1914. In some places he refers to the third edition of Sir Frederick Hewitt's book published in 1907, and in another place to the fifth edition, though the last edition was the fourth, published in 1912. These are instances of carelessness which considerably mar the book, and make one hesitate to recommend its use even though it contains valuable teaching.

THE "MEDICAL ANNUAL" AND THE SYNOPTICAL INDEX. (*a*)

THE doctor's spring is not complete until he has received his *Medical Annual*, and it is with pleasure we congratulate the anonymous editor on the high standard of the present volume. He has taken full use of his opportunities to gather together the results of the special investigations which the war has made necessary. There have been many advances in military medicine and surgery, and this book gives an excellent summary of them. No medical officer in His Majesty's Forces can take a more useful text-book in his kit than the *Medical Annual*. Notwithstanding the special attention given to military subjects, the general practitioner still finds the *Annual* a treasure-house of inspirations for his practice. He who reads it carefully may be satisfied that he is keeping abreast with the progress of knowledge.

Dr. Herbert French again writes the articles on General Medicine; Major De Courcy Wheeler, a new contributor, has charge of General Surgery; and Dr. Bryden Glendining again writes on Gynæcology and Obstetrics. We note with pleasure that Major Wheeler supports Mr. Robert Jones in his condemnation of operative treatment of septic fractures. Dr. Robert Hutchison makes the incautious statement, following Barrett and Smith, that "pyorrhœa alveolaris is caused by a specific amœba—the Entamœba buccalis." It is true that an amœba is to be found in the pockets in pyorrhœa, as in most other septic conditions of the mouth, but no causal relation has been proved. The results of treatment based on the hypothesis of a causal relation are not at all as good as those given by vaccine treatment. The subject of vaccines receives two articles—one of two pages in the General Review of Therapeutics by Dr. F. J. Charteris, and one of two-thirds of a page by Dr. Grüner. The latter is very inadequate, and contains a curious, if unconvincing, suggestion to explain the superiority of autogenous over stock vaccines. Dr. E. W. Goodall writes a useful article on Cerebro-Spinal Fever, but he gives insufficient information on the bacteriology of the disease, a subject on which much has been written in the last year or two. Dr. Herbert French recounts some of the many new methods of treating exophthalmic goitre, none of which seem to stand the test. We are grateful to Dr. Bedford Pierce for a judicious article on Psycho-analysis. It seemed for long that the solid truths which underlie psycho-analytic doctrine were likely to be overlooked because of the prejudices aroused by the fanciful superstructure. The doctrine deserves more study than it has yet received in England.

The editor reprints the unhelpful and irritating two-page glossary from last year's issue. The definition of "antiformin" is insufficient and ungrammatical. This glossary should be dropped in future issues or made adequate. One other suggestion we make—that the names of authors quoted in the text should be given in an index, general or special.

We also welcome a new volume of the *Medical Annual Synoptical Index* which covers the ten years 1905 to 1914. To the wise man who keeps his volumes of the *Medical Annual* on a convenient shelf, the *Index* saves much labour. The entries appear under the headings of the various diseases and methods of treatment, and the inquirer can find in a moment the references he wants in the ten volumes covered by the index. It is, indeed, an interesting and suggestive exercise to follow any particular subject through its several references.

(*a*) (1) "The Medical Annual: A Year-Book of Treatment and Practitioner's Index." 1916. 34th Year. Bristol: John Wright and Sons, Ltd. Pp. cxii. and 919. Price 10s. net.
(2) "The Medical Annual: Synoptical Index to Remedies and Diseases." For the ten years 1905 to 1914. Same publishers. Pp. xi. and 407. Price 8s. 6d net.

A NEW TREATMENT FOR GONORRHŒA. (*a*)

WE have read this little book with interest and profit, and cordially recommend it to the profession. Dr. Russ, while confident that gonorrhœa is a disease which can be cured, is not enthusiastic over present methods of treatment. Undoubtedly he is right in pointing out that the unsatisfactory results not uncommon are largely to be attributed to the fact that in the majority of cases the treatment prescribed is left to be carried out (*i.e.*, the manipulations of injections, etc.) by the patients themselves. We would add that a huge stumbling-block to the surgeon is the impossibility, in many cases, of getting the patient to abstain from alcohol. In our opinion the importance of this factor cannot be overestimated.

After a critical survey of the methods most commonly employed to combat gonococcal infection—viz., internal administration of urinary antiseptics, injection, irrigation, and the use of vaccines, Dr. Russ describes the system of treatment by electrolysis, evolved by himself. "It is founded upon the experimental studies of the behaviour of bacteria immersed in fluids which are traversed by a constant electric current, and the observations apply to the gonococcus as well as to other bacteria." By means of a simple apparatus clearly described, and the use of a 2 per cent. solution of sodium iodide, he has had most favourable results. After a treatment of over 70 cases, he states the advantages of the electrolytic method to be (1) limitation of inflammation to the anterior urethra; (2) absence or rarity of arthritis, ophthalmia, and epididymitis; (3) comparative rapidity of cure; (4) procedure is painless. He maintains that cure is obtained in from ten to twenty-two treatments.

The only adverse criticism of Dr. Russ's methods we have heard is the suggestion that stricture may follow. Only time, of course, can elucidate this, but with the weak current used, and if the cure be rapid, no deep ulceration can have been present, so we do not emphasise such possibility.

With the probability, almost certainty, of a large increase in the incidence of gonorrhœa within the next few years, and in view of the recommendations of the Commission on Venereal Diseases, we welcome this small work as pointing to a distinct advance in our efforts to master a disease, so often belittled, but which may have most dire results.

INFECTIOUS DISEASES. (*b*)

THE kernel of this book is to be found on the surface—that is, in the first two chapters, and the purpose and scope of the book are printed on the yellow wrapper which enfolds it. We have here a series of lectures on dietetics, somewhat novel both in subject and treatment, but, to quote the wrapper, "thoroughly practical." Dr. Meara "instructs rather than discusses."

Two or three physiological principles are first stated—one that the average man, when in a state of complete rest, requires food having a heat value of 3,000 large calories per diem; another, that the sick man at rest, especially the man stricken with an infective fever, requires not only as much food, but more than the healthy man. Lastly, we are taught that the idea of high fever impairing digestive functions is a myth, and the necessity for a spare and purely liquid diet for a typhoid patient an ignorant superstition.

Graves' classic epitaph "He fed fevers" is here carried out literally and with a vengeance. Dr. Meara, to be sure, deprecates stuffing his patients like barnyard fowls, but he gives as a model daily dietary a menu sheet that at first sight suggests enough food to last an ordinary man for days. In this country we are not accustomed to measuring food in terms of

(*a*) "A New Treatment for Gonorrhœa." By Charles Russ, M.B. Pp. 45. London: H. K. Lewis and Co., Ltd. Price 3s. net.
(*b*) "The Treatment of Acute Infectious Diseases." By Frank Shearman Meara, M.D., Ph.D. The Macmillan Co., N.Y. Pp. 340. Price 15s.

grams or calories—or, indeed, to measuring the quantities of food given, as a routine practice, at all. Perhaps, if we did, the amount urged by Dr. Meara might not appear so formidable. But his treatment does not end with giving food. Drugs, serum, vaccines and hydrotherapy are not forgotten, and here we must mention one admirable quality throughout the work—detail. It is not sufficient to know that your patient must go to bed. You must know all about the bed and how to make it, and make it comfortable for the patient and convenient for the nurse. We are re-introduced, too, to the cold tub, and the "slush" (not a mud-bath, by the way) instead of tepid sponging, and to open-air treatment. To the uninitiated the latter term might seem a misnomer, seeing that the patient is hermetically sealed in an air- and water-tight envelope up to his chin, his head muffled in a hood, to say nothing of a barricade of hot bottles, pillows and screens to shield him from the wind. The benefit is apparently derived not so much from the breathing of fresh air, as from the vaso-motor stimulation aroused by the exposure of the patient's face and upper air passages to the cold.

While chicken-pox has a chapter to itself among the thirty-five infections dealt with, the pneumonias and acute bronchitis are all taken together, and in general treated alike. To us lobar pneumonia, or pneumonic fever, is something quite *sui generis*—an inexplicable, self-limited mystery, unlike anything else in medicine, and, one would suppose, calling for a distinct line of treatment. We have always regarded over-feeding as a very real danger in this disease, a danger of which our nurses require warning, not encouragement in the opposite direction.

A special feature of the work is the recapitulation of the subject matter of each several chapter in tabular form, a process which only accentuates the many verbatim repetitions in the text, and adds unnecessary bulk to a rather heavy book. On the whole, however, Dr. Meara's book is a valuable addition to our dictionaries of treatment, and his methods are an object lesson in plain speaking and practical thoroughness.

Yet, one is tempted to ask, is there so much difference in the death-rate, for instance, of typhoid fever, when we compare his vigorous methods with our own?

TROPICAL MEDICINE OF ELIZABETHAN TIMES. (*a*)

How to preserve the health of those who go down to the sea in ships has long been a problem of great interest, and especially to Englishmen since the reign of Queen Elizabeth. In bygone days the perils of the sea were, one would have thought, sufficient to daunt the bravest, but those perils were small compared with the perils of disease to which every sailor on a long voyage was exposed. Scurvy in particular not infrequently caused fearful havoc among a ship's crew. Though now the disease is rarely seen, yet in the past many books have been written to explain its cause, its prevention, and its cure. Dr. Singer has presented us with an admirable facsimile reproduction of the earliest of such works, devoted to naval or tropical medicine, published in the English tongue. The book was written by one "G. W.," whom Dr. Singer identifies with the Elizabethan poet and gallant, George Whetstone. Whetstone was born about 1544. He fought the Spaniards in the Low Countries, he published plays in London, he attempted a voyage to Newfoundland, and he travelled in Italy. His "Cures of the Diseased, in Remote Regions" was not looked on as an important contribution to medicine even at the time it was first published, but there is no question as to its interest to those of us who are interested in the history of medicine. In the treatment of scurvy, Whetstone tells us that "it is a certain and assured medicine against this Disease, to haue such quantitie of Beere brewed with Graynes and Long pepper, as in the morning twise euerie weeke there may be giue a good draught to a man, proportioning three quarters of a pound of Graines, and three quarters of a pound of Pepper to a hogshead of Beere." It is interesting to note that David MacBride, writing from Dublin in 1767, recommends for the prevention and treatment of scurvy "fresh wort, or infusion of malt," as "a liquor similar to the recent juices of the sweet vegetables; fermenting regularly like them, and being precisely of the same mild, saponaceous, and aperient nature."

Dr. Singer has placed the profession in his debt by his many researches in the history of medicine, and he has made a notable addition to this debt by the publication of this rare little tract that now lies before us. The tract is printed with the well-known taste and care of the Clarendon Press.

(*a*) "The Cures of the Diseased in Forraine Attempts of the English Nation." London, 1598. Reproduced in facsimile, with Introduction and Notes by Charles Singer. 8vo. 11.6, pp. 28. Oxford: At the Clarendon Press. 1915.

WEIR MITCHELL. (*a*)

ON January 4th, 1914, the world was left the poorer by the passing from it of Silas Weir Mitchell. For more than half a century he had been giving to the world with both hands of the fulness of his knowledge and his work, yet the supply seemed to be inexhaustible. Suddenly the fountain ran dry, and we were almost numbed by the shock. Gradually, however, as we recover from the shock, we are beginning to appreciate the vast fruitfulness that has come from that fountain, and that though the source is gone the beneficent influence will long remain. It is right and fitting that the memory of such a man as Weir Mitchell should be kept green amongst us. Not only is it due to the man as a tribute to his merit, but also it is due to those that follow us that they, too, may share the benefits that he has conferred on us.

Mitchell's activities were manifold. In medicine, in prose writing, and in poetry he excelled; he was a stimulating and encouraging teacher, a research worker who brought many new facts to light, and a wise and temperate social reformer. No wonder America is proud of her great son at whose feet each nation of the world was glad to lay its tribute.

Just as a great man who belongs to his country, belongs in a more particular way to his family, so Weir Mitchell belongs particularly to the College of Physicians of Philadelphia. To Mitchell his College was especially dear. Apart from the lustre which his fame has shed upon it, he has benefited it by his wise counsel and sympathy, and enriched it with his princely gifts. Pictures, books, and manuscripts, nothing was too good or too costly for his College. In this, too, his example stimulated others.

The College has not been unmindful of the debt she owes, and the handsome volume before us will help posterity to appreciate Mitchell's worth. It was a happy inspiration to hold the memorial meeting of which this volume is a record in the hall of the College of Physicians of Philadelphia, where every stone was a monument to him. The gods have little left to give to one who merited the tributes there spoken and here printed, tributes to the man, to the man of science, and to the man of letters.

(*a*) "S. Weir Mitchell, M.D., LL.D., F.R.S., 1829-1914. Memorial Addresses and Resolutions." Philadelphia. 1914. 8vo., pp. 155. Portrait. Philadelphia: Taylor and Co.

LABORATORY NOTES.

"SOLOID" NASAL ALKALINE COMPOUND. (BURROUGHS, WELLCOME AND CO., SNOW HILL BUILDINGS, LONDON, E.C.)

WE have received a sample of this useful product, which has been modified by the addition of cocaine hydrochloride. This enables a spray or douche to be applied with advantage in the treatment of acute painful affections of the nasal passages. Each product contains 5 grains of borax, 5 grains of sodium chloride, and 1-6th grain of cocaine hydrochloride, and dissolves readily when powdered in warm water. One dissolved in two or three ounces of water yields an antiseptic fluid for use as a spray or douche in rhinitis and other nasal and naso-pharyngeal diseases. The original soloid without cocaine hydrochloride is still supplied.

Medical News in Brief.

Torquay's Health.

Dr. T. Dunlop, the Medical Officer of Health for Torquay, has prepared his annual report. In reference to the population, he states that according to the 1911 census, the females numbered 21,738 and males 17,033.

The total births registered during the year was 490—males 255, females 235; being 52 less than in 1914. Of the 490 births, 39 were illegitimate, compared with 35 last year. The birth-rate of 12.4 per 1,000, as compared with 21.9 for England and Wales, was by far the lowest rate recorded. The question, however, might be raised, why should the Torquay rate be so much lower than that of the country as a whole. The answer was that in making such comparisons they must bear in mind the constitution of the population. In Torquay they had a large excess of females over males, a large proportion of the females were spinsters, and some 40 per cent. were either above or below the child-bearing age. In the face of such facts, it was unreasonable to expect anything but a low birth-rate. Such a decrease was indeed disquieting, even in times of peace, but under present circumstances, when the war was taking such a toll of human life, it was essential that the Government and sanitary authorities should utilise every means to preserve the lives of those children born.

The return with respect to vaccination showed that of 572 births registered, 217 were successfully vaccinated. There were 301 certificates of exemption granted to conscientious objectors. The Medical Officer remarked: "In my last report I pointed out that 1913 was the first year on record in which the number of conscientious exemptions exceeds the number of children successfully vaccinated. The figures for 1914 show a similar condition of things, except that the difference is greater. In a few years the system of vaccination will be a dead letter. This yearly increase in the number of persons unprotected from small-pox undoubtedly means that if this dread disease should be introduced, a severe and costly epidemic will result."

The total deaths registered in the borough during 1915 was 543. The net deaths belonging to Torquay were 576, males 262, females 314. This was an increase of 88 over those registered in 1914.

There were 41 deaths of children under one year of age, against 45 in 1914. As there were 490 births registered, the infantile mortality was 83.6 per 1,000 births. The rate for England and Wales in 1915 was 110.

Popular Scarborough Doctor.

An interesting event took place at Scarborough at the weekly practice of the local division of the St. John Ambulance Association on May 28th, when each member present was formally presented by the Earl of Londesborough with a cabinet-sized photograph of their late surgeon and founder, Dr. C. A. Wilkinson.

The Earl, in making the presentation, said that in the death of Dr. Wilkinson he had lost not only a great personal friend, but one who had always been of much help to him on the joint-committee of the St. John and Red Cross in Scarborough, which had not been in formation for any length of time, and as a member of the British Red Cross Society.

Compliment to a Portrush Medical Man.

In recognition of their services on a night in February last, when the local lifeboat was called out to the aid of a minesweeper in difficulties off the Antrim coast, Dr. Wm. Porter and Mr. J. G. M'Morris (manager of the Belfast Bank) were presented with appropriate souvenirs by the Royal National Lifeboat Institution.

On the occasion some members of the crew refused to go out with the boat on account of the tempestuous sea which raged at the time. Dr. Porter and Mr. M'Morris motored to Portstewart, where they secured sufficient volunteers to complete the crew, and the lifeboat then set out to the assistance of the distressed vessel. Dr. Porter gallantly went out in the lifeboat in the hope of being able to render aid to the members of the crew of the minesweeper.

The presentations were made at a meeting of the local committee of the National Lifeboat Institution, in the Belfast Bank.

The award to Dr. Porter was a framed vellum certificate, which states:—"At a meeting of the committee of management of the Royal National Lifeboat Institution for the Preservation of Life from Shipwreck, held at their Offices, London, on the 14th April, 1916, the following minute was ordered to be recorded on the books of the Society: 'That the best thanks of the Royal National Lifeboat Institution be accorded to Wm. Porter, Esq., M.D. (Portrush), in recognition of his persistent efforts to obtain a crew to man the Portrush Lifeboat when called for service to H.M. minesweeper Grateful, in a north-west gale and very heavy sea, on the night of the 25th February, 1916, and of the stimulus given by his example in going out in the boat as a volunteer."

Royal Medical Benevolent Fund of Ireland.

The annual meeting of the Royal Medical Benevolent Fund of Ireland, was held in the Royal College of Surgeons, on June 7th, Mr. William Taylor, Vice-President of the College, presiding.

The report stated that the total number of applications considered during the year was 93. Of these 84 were from widows of medical men, three from, or on behalf of, their orphans, and three from medical men themselves. The total amount of grants during the year was £1,232 13s. 6d.

Southend Naval Hospital.

Ten thousand people brought gifts of money and provisions to Queen Mary's Naval Hospital at Southend on June 7th. The Queen herself sent a cheque for £100, a case of walking-sticks, and other things. The gifts were formally received by the Duchess of Portland.

Birmingham Hospital Unit.

The hospital unit organised in Birmingham some time ago for service with the British Army left for Aldershot on June 5th, where it had been ordered to mobilise.

Most of the members of the unit are men who have practices in Birmingham and the immediate neighbourhood. A few are from outside the city, but nearly all of these have been associated with the Birmingham School of Medicine either as doctors or as students. Dr. Leonard Parsons, assistant physician at the Birmingham General Hospital, goes as principal officer on the medical side, and Mr. Percival Mills, surgeon to the Royal Orthopædic and Spinal Hospital and assistant surgeon to the General Hospital, and Mr. J. H. Watson, hon. surgeon, Victoria Infirmary, Burnley, and formerly demonstrator of anatomy at the Birmingham School of Medicine, will have charge of the surgical side. The pathologist is Dr. J. Graham Forbes, bacteriologest, Hospital for Sick Children, Great Ormond Street, and divisional medical officer under the London County Council; and the radiographer is Dr. A. E. Carver, radiographer to the Hospital for Nervous Diseases, Birmingham, and tuberculosis officer at the Birmingham General Dispensary.

Women Nurses in Asylums.

Commenting, in his annual report, on the introduction of female nursing to male wards at certain lunatic asylums owing to the difficulty of getting male attendants, Dr. Passmore, medical superintendent of Croydon Mental Hospital, says:—"To my mind the work is degrading to refined women. I have had the opportunity of conversing with some of those who have been thus employed. I find that they deprecate the system in the strongest possible way."

The London Hospital.

At the quarterly Court of Governors of the London Hospital, on June 7th, the House Committee reported that, owing to the continuance of the war, the running of the hospital had been more difficult than ever. The financial position was such as to cause the Committee some anxious thought last year; and as a consequence of the great rise in the cost of all articles of food as well as of drugs, dressings, and everything used in that institution, it was feared that at the end of the year things would be worse. A sub-committee had been formed to go into the details of the working of the hospital. It had always been the aim of the Committee to prevent as far as possible any hardship falling on the civilian sick on account of the war. Several hospitals had closed their out-patient departments altogether, but it was hoped that it would not be found necessary to close any portion of the out-patient department at the London Hospital. They would, however, shortly be working there in circumstances so unusual that it was hard to say what might occur. For instance, the great majority of the clerks would have left by the end of July, and their places would be filled by ladies. Valuable as their work might be, some of it was so technical that it took a very considerable time for it to be learned. Similarly, some of their dispensers were being called up, and their places were being filled by lady dispensers. The St. Anthony Wards, generously presented by the Grocers' Company, had been opened, and they had already treated with conspicuous success 156 patients suffering from venereal disease. Mr. Walter Long, the President of the Local Government Board, accompanied by Dr. Newsholme, the Chief Medical Officer of the Board, had visited the wards, and expressed himself as most pleased with the work they were doing. Two of the present sisters had received the distinction of being decorated with the 2nd Class Royal Red Cross, and seven other former London nurses had received the same distinction in the King's Birthday Honours List.

Mr. Douro Hoare (the Chairman), in moving the adoption of the report, referred to the great loss which the country had sustained by the death of Lord Kitchener, and Mr. E. W. Morris (the Secretary) mentioned that when they received the first batch of wounded at the hospital Lord Kitchener came down at once and saw every one of the patients personally.

Liverpool Eye and Ear Infirmary.

AT the annual meeting of the above Institution, on June 7th, it was stated that 7,860 new eye cases and 3,304 new ear cases were reported in the out-patients' department, and the attendances these involved numbered 27,368. The in-patients occupying beds during the year had been 827.

In their report the Committee stated that, as last year, they considered it inadvisable to continue their appeal for funds to free the hospital from debt and for altering and equipping the proposed new building, and, in consequence, the amount received on this account showed a marked decrease. This year the Committee had been able to place all legacies received to a special account to form the nucleus of a reserve fund to meet extraordinary expenditure in future. Legacies to the amount of £1,673 had been received and placed to this special account. There was a slight decrease in the amount of the subscriptions for the year, but the Committee had cause to be pleased that this decrease was no greater than it was when the call upon the public purse for war charities and the increase in wages and taxation were taken into consideration. The ward, containing sixteen beds, set apart for the treatment of wounded soldiers, had been fully occupied during the year, and many cases of wounds affecting the eyes, ears and head had been successfully treated by the medical staff.

Panel Doctor's Fines.

At a meeting of Falkirk Burgh Insurance Committee it was reported that in connection with the recent action of the committee in imposing a fine of £5 5s. on a local panel doctor for infringement of medical certification rules, a letter had been received from the Scottish Insurance Commissioners stating that, having had the matter before them, they had decided to deduct the sum of £50 from the grant to be paid to the Insurance Committee, leaving it to them to deduct that sum from the payments to be made to the doctor. A letter was also read from the doctor in question protesting against the case again being taken up after he had already been tried and fined.—Mr. J. R. W. Ferguson moved that the matter be remitted back to the Medical Service Sub-Committee. He considered it a hardship to the doctor concerned that the Insurance Commissioners should take up the matter and inflict a heavier penalty than was thought necessary by the Medical Service Sub-Committee. If the Insurance Commissioners were going to override the decisions of the sub-committee, there was no need for that committee sitting at all.—Mr. Neil M'Lean seconded, and the motion was agreed to.

Massage Establishments.

By-laws for the regulation of establishments for massage or special treatment in London have been confirmed by the London County Council, so that the Council may be in a position to deal with objectionable features in connection with a number of such places which are regarded with suspicion.

City of London Tuberculosis Dispensary.

IN his latest report the Medical Officer of Health for the City states that during March and April 355 persons, including 43 new patients, attended the City Tuberculosis Dispensary.

London Children's Health.

IN the annual report of the London County Council school medical officer it is stated that during last year 308,959 children were examined in the schools, and of these 109,659 were found to require treatment. The results of the medical inspection of the selected age groups show a progressive improvement in the physical condition of the children. A total of 102,139 children were treated under the Council's medical treatment scheme, as compared with 86,819 in 1914.

Scarlet fever, which had manifested increasing prevalence since 1912, attained a maximum in 1914, and showed a decline in 1915. Diphtheria remained at practically the same level as in the preceding year. Measles was very prevalent during the early part of the year, and 31,313 cases were reported from schools. As in previous years, a large amount of work was done under the personal hygiene scheme, and satisfactory progress is recorded in connection with the institutional treatment of tuberculous children.

Nottingham Motor Ambulances.

On the appeal of Mr. Dennis Bayley, a representative meeting of lace manufacturers at Nottingham on June 7th decided to raise £3,000 to provide motor ambulances at the front. Mr. Bayley, who has now raised over £200 for this purpose, said that the ambulance convoy given by the Nottinghamshire and Derbyshire coal industry had been all through the Verdun battle, and was still there.

The Convalescents' Coach.

A coach and four is now making regular journeys between London and Laleham, about 40 miles out and home, for the benefit of wounded men from London hospitals. The trips have been started by Mr. T. W. Simpson, and the coach will ply three times a week throughout the summer.

The first trip was taken on June 5th from St. Thomas's Hospital with a party of 16 soldiers, including men who had fought at Mons, Ypres, Arras, Loos, and Hill 60.

Sanitation in War Time.

AT a conference on sanitary administration under war conditions, held on June 9th, at the Royal Sanitary Institute, Mr. Percy H. Boulnois read a paper dealing in detail with the economies in municipal sanitary work considered

possible. Among the suggestions of Mr. Boulnois was that the keeping of dogs in large towns should be either prohibited or discouraged by a heavy tax. Dealing with the employment of women for street cleansing, he said they were inclined to be too particular, and to cleanse a street as if it were their own backyard, but so far as health was concerned that was a fault in the right direction. He mentioned a Chiswick experiment, in connection with street darkening, of fixing phosphorescent sulphide between sheets of glass on trees and turning off all the lamps. These luminous objects, however, proved too tempting as targets for boys, who broke them with stones.

It was announced that the Institute has offered a prize of £50 and a medal for the best thesis setting out a complete practical scheme for maternity and child welfare work suitable for adoption by local authorities.

Medical Council in the Field.

SIR ARTHUR SLOGGETT, Director-General of the Army Medical Services, in view of the difficulty which his principal officers experience in attending his Advisory Board meetings, has formed a kind of inner council consisting of members on whose presence he can always depend. He himself is chairman, and the vice-chairman is Surgeon-General T. B. Woodhouse, C.B. The members are Surgeon-General Sir G. H. Makins, K.C.M.G., C.B., F.R.C.S., Surgeon-General Sir A. A. Bowlby, K.C.M.G., K.C.V.O., F.R.C.S., Colonel Sir Wilmot Herringham, C.B., M.D., F.R.C.P., Colonel Sir J. R. Bradford, K.C.M.G., C.B., F.R.S., M.D., F.R.C.P., Colonel Sir W. B. Leishman, C.B., F.R.S., M.B., F.R.C.P., K.H.P., and Lieutenant-Colonel W. W. O. Beveridge, C.B., D.S.O., M.B.

Glasgow University.

AT a meeting of the Glasgow University Court on June 8th, Principal Sir Donald MacAlister, who presided, said that he had to ask authority to make some additions to the equipment of Queen Margaret College, especially for students of medicine. The number had increased so greatly that all existing accommodation was already overflowed, both in anatomy and chemistry. He did not know what the necessary arrangements would cost, but as the number of women students of medicine had doubled during the year they must face the situation.

Replying to Dr. Hutchison, the Principal said the extension proposed took the form of internal arrangements.

The request was granted.

Girl Baby Murderer.

FROM Paris comes the story of an exceptional case of "infanticide" reported in a Cherbourg despatch announcing the arrest of a servant girl.

She is accused of poisoning her three-months-old baby, and from facts that have come to light it is alleged that, previous to murdering her own child, she experimented upon the seventeen-months-old baby of her mistress. Finding that its death aroused no suspicion, she proceeded to employ the same drug upon her own baby.

New Women's Hospital in South London.

THE new South London Hospital for Women, on the south side of Clapham Common, is to be opened by the Queen on July 4th, when her Majesty will receive purses for the support and upkeep of the institution.

The hospital has been built very simply, and none of the money needed for practical purposes has been spent on ornament. Georgian in style, of red brick and Portland stone, it has a practical beauty of its own. It fronts the common and London County Council tramway cars pass the doors. It was begun four years ago in response to a definite and increasing demand for a hospital for South London and the southern counties run and staffed by women.

A special feature will be paying wards where women of limited means unable to pay the heavy charges of a nursing home may have privacy at a moderate charge. For a ward with one bed the charge will be 3 guineas; for two beds, 2 guineas; and for accommodation in an eight bed ward, divided into cubicles, the charge will be 1 guinea each.

There is accommodation for 80 patients. There are four general wards, a children's ward, the private wards already outlined, an isolation department, and also X-ray and pathological departments. The "Queen Mary Ward," which is completed except for its beds and medical equipment, is 70ft. long by 26ft. wide, and the windows allow for a perfect air current without draughts.

The Association of University Women Teachers have arranged to support a bed, and a similar arrangement has been made by the Teachers' League and a league of professional and business women. Lady Cowdray is giving all the beds required for the hospital, and other promises have been received.

University of London.

THE following candidates have passed the Third (M.B., B.S.) Examination for Medical Degrees during May, 1916:—

Honours.—Leonard G. Phillips, B.Sc. (*a*, *d*); Stanley Ritson, B.Sc., (*a*, *d*, *e*, University Medal).

(*a*) Distinguished in Medicine; (*d*) distinguished in Surgery; (*e*) distinguished in Midwifery and Diseases of Women.

Pass List.—Louis A. Celestin, William M. Crombie, Christopher I. de Silva, John A. W. Ebden, David S. Graves, Innes H. Pearse, Lloyd D. Phillips, Emma C. Pillman, Arthur L. Punch, Leslie N. Reece, Douglas G. C. Tasker, James W. T. Thomas, Arthur H. Turner, Sibyl I. Welsh, Arthur W. Woo.

The following candidates have passed in one of the two Groups of subjects: Group I.—Grace M. Griffith, Cyril E. Petley, Basil Sampson, Alfred G. Simmins, Eric C. Spaar, B.A.

Group II.—Arthur W. Adams, Frederic V. Bevan-Brown, Robert M. Dannatt, Walter H. Lloyd, Violet I. Russell.

Royal College of Surgeons.

AT a meeting of the Council of the Royal College of Surgeons on June 8th Sir Watson Cheyne, President, in the chair, the following members of the college, having passed the required examinations and conformed to the by-laws, were admitted Fellows:—

A. L. Pearce-Gould, M.D.Oxon. Univ. Coll. Hosp.; C. W. B. Littlejohn, Capt. R.A.M.C., M.B.Oxon., Melbourne Univ. and St. Bart.'s Hosp.; G. S. Miller, M.B.Lond., Guy's Hosp.; F. D. Saner, Camb., Univ. and Guy's Hosp.; and R. S. Lawson, Temp. Surgeon R.N., M.B.Edin., St. Bart.'s Hosp., not being a member of the college, was also admitted a Fellow.

The following candidates, having fulfilled the requirements of the surgical and dental sections of the Board of Examiners in dental surgery, were admitted Licentiates:—

A. S. Blacklaws, C. M. Bullpitt, Guy's Hosp.; J. J. C. Chiappa, Middlx. and Nat. Dent. Hosps.; B. Eady, Guy's Hosp.; R. J. Ellis, Middlx. and R. Dent. Hosps.; R. J. G. Halden, Guy's Hosp.; A. G. Hewer, Middlx. and Nat. Dent. Hosps.; P. J. Hugo, C. H. Kidner, F. C. Lean and O. O. Lloyd, Guy's Hosp.; L. G. Lunnon, Middlx. and R. Dent. Hosps.; H. P. Mabe, B. Micklethwait, Middlx. and Nat. Dent. Hosps.; M. C. V. Thom, H. V. Vogt, M H. Wermig and S. A. Woolf, Guy's Hosp.

The President reported that a meeting of the Fellows would be held on July 6th for the election of four Fellows into the Council in the vacancies occasioned by the retirement in rotation of Sir Alfred Pearce-Gould, Mr. W. F. Haslam, and Sir Arbuthnot Lane, and by the death of Mr. Stanley Boyd. He added that Sir Alfred Pearce-Gould and Sir Arbuthnot Lane did not propose to offer themselves for re-election.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

LETTERS TO THE EDITOR and Original Papers intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of bona fides. These should be addressed to the Editor at the Offices of this Journal; if in Ireland, to the Dublin Office, 29 Nassau Street; from other parts of the United Kingdom, these should be addressed to the London Office, 8 Henrietta Street, Strand.

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Small announcements of Practices, Assistances, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

DEMOS (Rotherhithe).—You are mistaken in thinking we treat the subject as one of politics. It is a question of justice and fairplay to a profession which at present receives neither.

STATE MEDICAL SERVICE.

SPEAKING at the annual meeting of the Panel-Medico Political Union, Dr. W. Coode Adams (president) declared that the signs pointed to the establishment of a State medical service.

R.A.M.C. (Chesterfield).—We believe neither the German figures regarding the proportion of wounded who return to active service, nor the low average duration of incapacity.

£100,000 FOR SCHOOL OF MEDICINE.

SIR WILLIAM JAMES THOMAS, the Welsh colliery owner, has given £100,000 towards the establishment of a Welsh school of medicine.

POST (London, W.C.).—We note the opinion of the paper you forward. You will see from a quotation in this issue that the medical corespondent of the *Times* holds the contrary view.

QUEEN'S GIFT TO BRIGHTON HOSPITAL.

THE Queen has presented the Royal Pavilion Hospital at Brighton with a building to be used as a school for the teaching of some occupation to limbless soldiers.

X-RAY (Ealing).—We reviewed the book in last week's issue. Our experience coincides with your own.

GAS GANGRENE OF THE NECK.

DR. PAUL GUENIOT has described two cases of gas gangrene of the neck, and the feature of special interest is the method he used in order to distinguish with certainty this affection from subcutaneous emphysema. The gas in gangrene is nearly always inflammable. This fact does not prevent the use of the thermo-cautery: on the contrary, numerous incisions should be made with this instrument, and most frequently a cure will be obtained.

O. T. S. (Loughborough).—We think the time has now come when graduated exercises may be commenced.

WORKMEN'S COMPENSATION ACT, 1916.

THE Secretary of State for the Home Department gives notice that, in consequence of the resignation of Dr. J. W. Batterham, one of the Medical Referees under the Workmen's Compensation Act, the appointment held by him will be vacant as from the 18th instant. Applications for the post should be addressed to the Private Secretary, Home Office, London, before July 1st. Dr. Batterham was attached more particularly to the Brighton, Lewes, Arundel, Chichester, Worthing and Hayward's Heath County Courts, Sussex.

RUGGER (Aldershot).—Such a fracture could be produced, but it is not the common result. The age does not negative it.

DUNGAR.—We think your best course would be to write to the High Commissioner for S. Africa, Victoria Street, London, S.W., and explain the position.

WIRELESS (Birmingham).—Your query should be addressed to a paper dealing with such technical matters.

Meetings of the Societies, Lectures, &c.

FRIDAY, JUNE 16TH.

SOCIETY OF TROPICAL MEDICINE AND HYGIENE (11 Chandos Street, Cavendish Square, W.).—5.30 p.m.—Annual General Meeting. Mr. J. Cantlie: Topography of the Liver in Relation to Liver Abscess. Dr. G. C. Low: An Interesting Case of Syphilitic Pyrexia in an Indian Native. The Value of a Positive Wassermann Reaction in Diagnosis.

Vacancies.

County Asylum, Whittingham, Preston, Lancs.—Assistant Medical Officer. Salary £250 per annum, with furnished apartments, board, and washing. Applications to the Medical Superintendent.

Hampstead General Hospital, Haverstock Hill, N.W.—Resident House Physician. Salary £200 per annum. Applications to the Secretary.

London Temperance Hospital, Hampstead Road, N.W.—Assistant Resident Medical Officer. Salary £120 a year, with residence, board, and laundry. Applications to the Secretary.

Sheffield Royal Infirmary.—House Physician. Salary £120 per annum, with board and residence. Applications to Jno. W. Barnes, Secretary.

Bury Infirmary.—Junior House Surgeon. Salary £150 per annum, with board, residence, and washing. Applications to the Honorary Secretary, Infirmary, Bury, Lancs.

West Riding of Yorkshire: Middleton-in-Wharfedale Sanatorium, near Ilkley.—Lady Assistant Medical Officer. Salary £300 per annum. Applications to Francis Alvey Darwin, Clerk to the County Council, County Hall, Wakefield.

Bournemouth Royal Victoria and West Hants Hospital.—House Surgeon. Salary £150 per annum, with board, lodging, and washing. Applications to the Chairman of the House Committee, Poole Road Branch.

Darlington Hospital and Dispensary.—House Surgeon. Salary £160 per annum, with board, residence, laundry, etc. Applications to H. F. Creek, Secretary, 46, Greenbank Road, Darlington.

St. Mark's Hospital for Cancer, Fistula, and other Diseases of the Rectum, City Road, E.C.—House Surgeon. Salary £150 per annum, with board, lodging, and washing. Applications to the Secretary.

Appointments.

CHERRINGTON, D. G., B.A.Cantab., M.R.C.S., L.R.C.P., District Medical Officer of the Rye Union.

Births.

JULER.—On June 5th, at 24, Cavendish Square, W., the wife of F. A. Juler, F.R.C.S., of a daughter.

KELLY.—On May 30th, at 89, Lower Baggot Street, Dublin, to Lieut.-Col. W. D. C. Kelly, R.A.M.C., and Mrs. Kelly (*née* Wolseley)—a daughter.

STODART.—On June 6th, at Tresillian, Topsham, Devon, the wife of Lt.-Col. T. Stodart, I.M.S., of a son.

Marriages.

PAVEY-SMITH—NORTHWOOD.—On June 3rd, at St. James's, Camberwell, by special licence, A. Bernard Pavey-Smith, Capt., R.A.M.C. (T.), younger son of Mr. and Mrs. A. E. Smith, of the Hollies, Nailsworth, to Elizabeth, youngest daughter of Mr. and Mrs. Northwood, of Spondon, Derby.

Deaths.

AUSTIN.—On June 5th, at 25, Moorfield Road, West Didsbury, Manchester, Elfred Chalmers Austin, Capt., R.A.M.C., Medical Supt. of the Withington Institution, Manchester, formerly Medical Supt. of Hope Hospital, Salford, in his 40th year.

FITZGERALD.—On May 27th, Charles Edward Fitzgerald, M.D., of 27, Upper Merrion Street, Dublin, Hon. Surgeon Oculist to His Majesty in Ireland, only son of the late Francis Alexander Fitzgerald, Baron of the Court of Exchequer, Ireland.

GARNONS WILLIAMS.—Lost in H.M.S. *Hampshire* on June 5th, Penry Garnons Williams, Fleet Surgeon, R.N., beloved husband of Teresa Garnons Williams and youngest son of the late Rev. Prebendary Garnons Williams, Abercamlais, Brecon.

GEOGHEAN.—On May 31st, in the naval action off Jutland, Herbert Lyne Geoghegan, M.D., Fleet Surgeon, R.N., H.M.S. *Black Prince*.

JOHNSON.—Killed in action on May 31st, 1916, on H.M.S. *Defence*, George Moore Johnson, M.B., M.A., eldest son of the late G. W. M. Johnson and of Mrs. Johnson, of 27, Beckenham grove, Shortlands.

NORRIS.—On May 31, in H.M.S. *Indefatigable*, Fleet Surgeon Hugh Leigh Norris, youngest son of the late Dr. Henry Edmonds Norris, of Charmouth, Dorset, and grandson of Captain Marryat, R.N., C.B.

PALMER.—On June 4th, suddenly, at Mundesley-on-Sea, Arthur E. Palmer, M.R.C.S., L.R.C.P., of Loughborough, Leicestershire.

WILKINSON.—On the 5th inst., at his residence, 3, Lebanon Park, Twickenham, John Sebastian Wilkinson, F.R.C.S., eldest son of the late William Henry Beacon Wilkinson, F.R.C.S., in his 81st year.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

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AT THE PERIPHERY.

" Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

Sir Thomas Watson.

IN connection with the subject of fevers, which is dealt with in another column, it is curious to read what Sir Thomas Watson (1792-1882), writing in 1838, had to say on the subject of the varieties of " Continued Fever." "Although fever is, as I have stated, a specific disease, it assumes divers forms; and so dissimilar are some of its phases that they might seem to belong to totally different maladies. These variations relate not only to individual cases, but to whole epidemics. In some places and seasons the inflammatory type predominates, marked by excitement of the sanguiferous system; in others depression of the nervous system, characteristic of the typhoid type, which is the prominent feature of the disease. Most generally of all, the disorder commences with inflammatory fever and ends with typhoid symptoms."

The Rash and the Severity.

LATER on there occurs a passage which will surely be of interest to some of those who have been discussing a cognate question in our correspondence columns. " So that the differences observed in the aspect and phenomena of continued fever depend more, I conceive, upon an acquired disposition of the human body produced by some obscure general influence, and therefore affecting the entire London community, than upon any change in the essential nature of the disease, or in the virus which (as I believe) occasions it. The inverse relation between the rash and the intestinal ulceration is remarkable. When the one is prevalent the other is rare. It would seem, in conformity with Dr. William Budd's views, that the specific poison displays its elective affinities by settling sometimes upon the mucous glands, sometimes upon the cutaneous tissues, and sometimes by sharing itself, though unequally, between the two."

Medical Literary Style.

IT does one good to read Sir Thomas Watson, if only because of his style. With the exception of Trousseau, he is probably the finest exponent of clear and graceful writing on medical subjects in any language. And if Trousseau be really his superior, the superiority derives, in part at any rate, from the extraordinary flexibility of the French language, than which no more perfect instrument for the conveyance of thought has ever been evolved. The question of clearness of thought and language in medical literature has recently been discussed with some asperity in the correspondence columns of the *British Medical Journal*. The ball was opened by a letter from Dr. Mercier, who animadverted on the sloppiness of medical writing, of which he gave some instances. For this he was attacked by several correspondents, with the result which those who are acquainted with Dr. Mercier as a controversialist had no difficulty in foreseeing—namely, that his antagonists were badly but very gracefully worsted.

Counter-irritation.

EXACTLY what Dr. William Budd's views were I do not know, but they would probably be found to be similar to those so ably expressed by Dr. Midelton, of Bournemouth, in the letter which we published last week in reference to Professor Gougerot's article. Active counter-irritation is a therapeutic measure which has quite undeservedly fallen into disrepute. The seton, the blister, followed by savin ointment, the fixation abscess and even the homely mustard plaster are now seemingly fallen upon evil days. Yet there can be no doubt that they have a value in ridding the system of noxious elements which the blood is unable to void by the ordinary channels. Dr. Midelton truly says that Listerism has taught us to be unduly afraid of pus. The older surgeons used to speak of " laudable pus," by which they meant pus which was odourless. The term would be more suitably applied to the pus which, by means of a seton or fixation abscess, assists in debarrassing the system of toxic matters.

Baths.

DR. MIDELTON might have gone further (he may possibly be induced so to do) and have developed the thesis, held by many balneologists, that the obscure pains which are known as " rheumatism " are due to insufficient activity of the cutaneous surface. It is a fact that these rheumatic pains are common in cold humid climates, and very uncommon in warm dry

climates. The widespread testimony to the efficacy of thermal baths, light baths, sudorific baths, massage and similar surface treatments in the relief of these conditions points inevitably to a power in the cutaneous covering of exorcising the demon toxins which give rise to these troubles. On clinical grounds it is impossible to deny to the skin an emunctory power of the first importance, and there can be no gainsaying the position of experienced and thinking physicians that we have therein a curative potential which is unduly neglected by modern therapists.

Medical Law Reform.

Mr. Sewill's letters on Medical Law Reform continue to attract the attention of our readers. This is as it should be, for the question is one in which the ordinary man takes but a languid interest. The languor is no doubt due to the feeling which prevails that, agitate as we may, in our spasmodic disrupted manner, nothing will ever be done. As Mr. Sewill has shown, the B.M.A., hitherto the only body which could have moved in these matters, has been worse than useless. The present is not, in one sense, a very suitable time at which to try and re-awaken interest, because so many of the interested have things more serious to think about than medical politics. In another sense, however, the present is the moment of all others. The quotation from the *Times* which we published last week affords abundant evidence of the reality of the danger to which I have for several weeks now persistently and insistently been calling attention. The intention to create a State Medical Service is in certain powerful quarters a fixed determination. The *Times* correspondent, who is doubtless inspired, says: "If the time for laying the foundations of a state medical service was ever ripe, it is ripe now." Let us therefore look to our defences.

Qualified and Unqualified.

In any arrangement or bargain which is concluded between the Profession and the State, it is obvious that one item should be a drastic reform of the present lax laws by which the profession holds its position. Members of the profession are liable to severe penalties if they transgress certain very loosely defined rules, but unqualified practitioners may transgress all rules with perfect impunity. And yet the State does nothing whatever to remedy this state of matters. If it be the case, as we must assume it to be, that the rules which apply to qualified men are framed and enforced for the protection of the public, then from the point of view of that same public it is obviously the height of inconsistent absurdity to allow the unqualified to set these rules at naught without suffering the slightest inconvenience.

A Free Country.

The defence of the absurdity is, of course, well known. It sets forth that if a man is such a fool as to pay fees to an unqualified practitioner when there are hundreds who have laboriously qualified and are duly labelled as such, then in a free country he must be allowed to be a fool. Such an argument might be convincing if it were consistently acted upon. But the State has always in some degree played the part of grandmamma to the public, and in recent years its excursions in this direction have been increasing and not diminishing. In matters of the public health, for example, the State recognises that the policy of *laissez-faire* is an impossible policy, and it very properly declines to allow the individual to poison himself, his family or his neighbours, by indulging in a preference for bad drains or an impure water supply. In matters much less important than the public health the State takes the individual fool under its parental protection, and that in matters where it is the individual who suffers and not the community.

The Confidence Trick.

The exponents of the "Confidence Trick," for example, always engage the attention of the police when they are careless in covering up their tracks. Here the individual suffers in his pocket only. The medical confidence trick, which is being openly played by thousands of quacks and charlatans upon the unfortunate whose judgment is obscured by disease and suffering, is regarded by the State with an indulgent smile. The citizen's property is protected while, in the sacred name of liberty, his person, and indeed his very life, are left at the mercy of a horde of predatory sharks whose only hope of success lies in the ignorance and gullibility of the public. If it is right to protect the fool against his own folly in the one case, the grounds for so protecting him in the other are simply overwhelming. I understand that the number of unqualified dentists practising in London alone reaches a figure which is astounding. I once knew one of this tribe. He amassed a large fortune without having ever had any training whatever, theoretical or practical.

Conscientious Objectors.

The Portsmouth Military Service Tribunal recently suggested that a possible outlet for the energies of conscientious objectors would be found at the Borough Asylum, from which so many of the attendants have gone to the war. The Court intimated that it would regard the work as of national importance. Dr. Devine, the medical superintendent, reported as follows on this suggestion:—"Conscientious objectors as a class, however honest they may be in their opinions, are unsuitable for the care of the mentally disturbed. They hold opinions contrary to those of the ordinary citizen; they are impervious to argument or criticism; they are egotistical and self-opinionated; and they reveal generally a type of mental constitution which forms the basis of psycho-neurotic symptoms and the various types of mental disturbance." With these views I cordially agree. If conscientious objectors are to find their way to lunatic asylums, it must be as inmates—not as attendants.

Sinapis.

Sir James Thomas has given 1,000 guineas to endow a bed in Cardiff Hospital in memory of Lord Kitchener.

OF FEVERS.

Charles Murchison (1830-1879), who laid the foundation of such knowledge of fevers as we possess to-day, began his professional life as a surgeon in the Bengal Army. In 1856 we find him a physician to the London Fever Hospital, and from 1871 until his death he drew crowds of medical men and students to his lectures at St. Thomas's. It was in 1862 that he published his now famous "Treatise on the Continued Fevers of Great Britain." And yet it was not until six years later, taking advantage of the work of Sir William Thomson (afterwards Lord Kelvin), which established "an absolute scale of temperature," that Wunderlich (1815-1877) began to teach thermometry as a routine measure in clinical diagnosis. Sir Samuel Wilks has told us that the clinical thermometer was regarded as a novelty at Guy's Hospital as recently as 1870, an interesting fact which should not be regarded as any serious reflection upon Guy's. The pocket clinical thermometer we owe to Sir Clifford Allbutt. The present-day convenience of measuring the temperature under the tongue in one minute, instead of in the axilla in five or more, was rendered possible by the ingenuity of instrument makers.

The commonly accepted "normal" of 98.6° or 98.4° F. should not be, as it too frequently is, regarded as absolute. There are many people in quite good health whose temperature is frequently, if not generally, above this level, and there are many more who show a reading definitely below it. The story of the significance of subnormal temperatures remains to be written. It is a very interesting and instructive story whose *mise-en-scène* is the territory of the internal secretions. Of slight advances on the accepted normal there are few which are permanent, but a great many which are temporary. It is a good rule which bids us preserve our equanimity in face of a rise of temperature which does not exceed 100° F., but it is by no means a rule which is free from exception. A well-known teacher and examiner (if it was not Sir Samuel Wilks, it was one of his day) used to say that if a student omitted to include phthisis pulmonalis in his list of continued fevers, it was his practice to refer him to his studies. And yet phthisis pulmonalis is by no means always characterised by a continued elevation above the normal temperature. The elevation, even if it exist, which is not invariably the case, must often be sought carefully and even meticulously. More often than not, though otherwise absent, it is present after muscular exercise. The routine measurement at 9 p.m. and 9 a.m. may fail to reveal it, for it not infrequently lurks between the hours of 2 p.m. and 6 p.m. And then, there are those who satisfy themselves with looking for the elevation in the evening only, whereas perhaps the most characteristic thermometric sign of tuberculosis (some authorities even go so far as to regard it as pathognomonic of the disease) is a reversal of the usual order—namely, a morning rise and an evening fall.

It is the custom to regard malignant disease as wholly innocent of thermometric vagaries, and many are the mistakes in diagnosis which have had their origin in too confident a reliance upon what is unquestionably a general rule. It is a fact to which the young practitioner should never allow himself to be blinded by the thumb-rule of hastily compiled text-books that carcinomata, especially of the abdominal viscera, are very often accompanied by a slight rise of temperature. It would, indeed, be correct to say that in a patient of the dangerous age, where the more obvious causes can be excluded, disorderly thermometrical excursions should always provoke a minute search for evidences of the dreaded growth.

In estimating the possible significance of a slight rise in temperature, it is always well to remember that children and women are apt to display an occasional instability of thermal record which is alarming to the inexperienced, an instability which is certainly much more pronounced in the upper classes than it is in the lower. In searching for an evening rise of temperature for the unmasking of tubercle, the investigator must not forget that such a rise is the rule rather than the exception in unmarried women for a few days before the menstrual period. The clinical thermometer is now as indispensable in the nursery as a powder puff in a ladies' waiting-room, and often has it occurred that the doctor has been summoned because nurse has taken Master Tommy's buccal temperature immediately after the urchin had surreptitiously imbibed a cup of hot milk. Children are now sent to bed with a thermometer in circumstances which formerly would have meant castor oil or the birch rod, or both. The use of the clinical thermometer by the laity is the cause of much blasphemy by the profession.

The term "fever" is generally used to denote one of the exanthemata. It is not so very long ago since "the Fever," meaning typhoid, was regarded as one of the necessary penalties of childhood and adolescence—much as measles and mumps are still too often regarded. In considering the list of recognised fevers it is surprising—and chastening—to realise how many there are the nature of whose virus is still unknown. Of these there are no less than ten, and, if we except typhoid, they are the best known. Scarlet, measles, German measles, small-pox, chicken-pox, typhus, mumps, rheumatic fever, yellow fever, and whooping cough are all diseases of whose pathology we are still ignorant. Having regard to this fact, we may claim credit to ourselves for being able to combat these conditions with a large measure of success. We are not yet in a position to provide against them in the same sense as we could provide aganst, say, enteric, cholera, diphtheria and malaria, were we given a free hand; but the application of general principles has been successful in lessening their incidence, and experience has taught us much in the matter of their rational treatment. The latest book on the subject (*a*) of fevers is from the pen of one who has had exceptional experience. It deals very largely with the aspect of treatment, which is approached from a very practical and helpful standpoint. Such a book was wanted. It will undoubtedly receive a warm welcome. It deserves one.

(*a*) "A Handbook of Fevers," by J. Campbell McClure, M.D. (London, 1914.)

CURRENT TOPICS.

British Prisoners in Germany.

The medical aspect of the treatment of British prisoners of war in Germany receives some consideration in two White Papers which have recently been issued on the subject. They contain a record of the reports made by various representatives of the United States Ambassador in Berlin, who had visited the prison camps and questioned the men there detained. This country is deeply indebted to the American Ambassador and his staff for the humane work they have so regularly performed for many months in supervising the conditions under which our brethren in Germany are interned. The inspections took place between October 13th, 1915, and April 6th, 1916, and the conditions in the camps appear to be generally improved. Sanitation was pronounced good, and the health of the men generally excellent. There were some complaints as to insufficient clothing, irregular delivery of parcels, and inconsiderate treatment by the camp officials. As to food, it was found to be physiologically adequate in quantity and of satisfactory quality in nearly every case, equivalent to 2,700 calories per man per day; the chief objections to the ration being its monotony and the fact that the food was unpalatable because unaccustomed. Dr. A. E. Taylor, who visited Ruhleben, found the fault that the ration was deficient in fat. He urges the necessity of organisation of the food supplies sent to the prisoners from this country, suggesting a diet table which would adequately supplement the camp ration. He deplores the lack of organisation as producing inefficient and wasteful results. A large number of the prisoners depend to a great extent on the supplies of food sent from outside or from home, and it is in the provision of the latter that he urges the need for organisation. With regard to the notorious Wittenburg camp, it is pleasing to know that the general health has been excellent since the disappearance of typhus. A new commandant had been appointed and a number of improvements had been made. Clothing, for example, was entirely satisfactory. Speaking of the conditions last autumn, Mr. Osborne, who visited the camp on behalf of the American Ambassador, says that the authorities regarded their charges not as honourable prisoners of war, but as criminals, whom only a *régime* of fear would keep in obedience, and he remarks that all evidence of humane and kindly feeling between the authorities and the prisoners was lacking. We welcome the statement of Mr. Jackson in regard to Döberitz and certain other camps that some prisoners bore testimony to the kind treatment received from German medical officers. We have never been willing to believe that the infamous medical officer of Wittenburg was typical of the medical profession of Germany.

Medical Aid to Rebels.

It is a question of some interest, and was recently of some practical importance in part of His Majesty's realms, to define the duties, moral and legal, of a medical man asked to give professional assistance to a rebel in arms. In a letter in our Correspondence columns in this issue, "Captain R.A.M.C.," suggests that Red Cross members of any belligerent body should be given the privileges to which the Geneva Convention entitles them. We are not sure that the Geneva Convention has considered the question of rebel forces at all, or that a rebel body in arms is entitled to the privileges of a recognised belligerent, but, at any rate, the question we are now discussing is somewhat different. In the conditions of civil warfare which existed in Dublin two months ago it must have happened to many medical men to give assistance to wounded persons who might or might not be rebels. It is certainly not the business of a surgeon to investigate too closely in such a case, and we are sure that few, if any, would refuse their aid. It is somewhat different when a medical man is asked to enter a position held as a rebel stronghold to give assistance to the wounded. We do not think that a medical man refusing such a call is guilty of any professional *lache*. A medical man is not bound to risk his life by going to the aid of those who are wilfully in arms against constituted authority. Moreover, on the legal point, it would appear that to give any aid, medical or otherwise, would be a crime. We do not profess to know the proper legal phraseology, but to succour the King's enemies is, we believe, against the law. Nevertheless, we do not think that public opinion would permit the giving of surgical assistance under such considerations to be treated or punished as a crime. The discussion of these points is, at the moment, academic, and we trust that never in our lifetime may a situation again arise in which it will again become practical.

Medico-Legal Aspect of Rifle-Bullet Wounds.

It is only a few weeks since in a note in our columns Dr. McWalter urged the need for review of the text-book teaching as to the effects of rifle-bullet wounds considered from the medico-legal aspect. The question of length of range may be one of much importance in deciding the guilt or innocence of an accused party, and the old dogmatic statements as to the marks of wounds received at close range must receive careful scrutiny. We are glad to see that Colonel W. H. Willcox is taking an interest in this question, for no one has a wider experience of medico-legal problems or greater authority in all such matters. Dr. McWalter found that with bullet wounds received at a range of about nine feet there was no charring of either the clothes or the skin. Colonel Willcox, in experiments with targets of white cardboard and of chamois leather, and with the ordinary service rifle and ammunition, found that at three inches from the muzzle of the gun there was no charring of either the cardboard or the leather, and only slight blackening. At a few inches more there was no blackening at all. It is to be hoped that these plain facts will become widely known, and that we will have no more foolish evidence to the effect that the range cannot have been short or there would have been more charring of the clothes.

Miners and Phthisis.

Two interesting reports are published regarding the connection between mining and phthisis. Dr. J. S. Haldane, at the annual meeting of the Institution of Mining Engineers, held on June 8th, gave an address on "The Health of Old Colliers." He said it was well known that colliers—*i.e.*, coal miners—suffered very little from phthisis. He pointed out the remarkable fact that the phthisis rate among colliers was not only much lower than in nearly all other occupations, but was even lower than in the exceptionally healthy occupation of farm labourers, despite advantages of pure air and relative segregation in the latter occupation. The low death-rate from lung disease among colliers up to the age of 55 was almost entirely due to their relative immunity from phthisis, and this immunity existed in 1850 just as now. Coal-dust certainly did not kill germs, but it had come to be regarded

by medical men as a preventive of phthisis. The lecturer added that if this was so, coal-dust in moderation was, on the whole, and despite explosions, an advantage to the safety of colliers. Town-dwellers and smokers might also take comfort to themselves in the thought that in introducing smoke particles into their lungs they were educating their lung epithelium to deal with really harmful foreign bodies.

The London smoker may now enjoy his sedative pipe as a preventive medicine without worrying too much over war economy.

The second contribution to the subject is the result of a preliminary inquiry, conducted by Drs. Watkins-Pitchford, A. J. Orenstein, and W. Steuart, into the prevalence of pulmonary tuberculosis among the natives working in the mines of South Africa. Here, of course, the industry is gold mining. The conclusions arrived at are :—(*a*) That the disease in its open, or communicable, stage is far less prevalent amongst natives actually working on the mines than has been hitherto supposed, only one case, out of 400 examined, having been detected. (*b*) That the problem of the control of the disease is not so formidable as has been anticipated; its total eradication from the mines, therefore, appears to be a feasible proposition. (*c*) That although 107 natives were examined whose term of employment underground exceeded two years only one was found with marked X-rays signs of silicosis apparently uncomplicated by tuberculosis; it seems, therefore, fair to surmise that marked silicosis is at least not more prevalent than pulmonary tuberculosis.

Thymus Death.

The physiology and pathology of the thymus gland are still veiled in obscurity. The literature on the subject is scattered and incomplete, and any practitioner who is so unfortunate as to meet with a case of thymus death may be excused for his powerlessness to avert the fatality. Dr. Frederick Howard Falls has written an interesting paper on this subject, which appears in the current number of *Surgery, Gynæcology and Obstetrics*. He reports one case of thymus death occurring in an infant four hours after birth, the child having breathed spontaneously and without difficulty for two hours, when cyanosis and progressive dyspnœa developed, the pulse slowing down to 30 beats per minute just before death. A *post mortem* examination showed the trachea and left lung to be compressed by a large thymus 4 cm. broad at its widest part and 5½ cm. long. No abnormalities were found in the other ductless glands or lymphatic tissues, hence the case was included in the group of *status thymicus*. After a comprehensive survey of the literature available Dr. Falls comes to the following conclusions :—Partial thymectomy is of benefit in cases where the thymus alone is hyperplastic and the pressure symptoms are severe. Total thymectomy is contraindicated, for it is followed by rachitis and defective growth. The benefit of operation in cases of *status lymphaticus* with enlarged thymus is very doubtful. Tracheotomy and intubation are of no value in most cases because the pressure occurs too low down—as a rule where the trachea is crossed by the innominate artery. During operation the surgeon must bear in mind the possibility of aberrant vessels—in the case reported here the left innominate vein was found crossing the anterior surface of the thymus, instead of occupying its normal position deep to the gland. Dr. Falls pleads for a more systematic and complete record of all such cases in order that trustworthy material may be available for consideration.

Carnegie Trust and Infant Welfare.

The promotion of the welfare of mother and child is a work of national importance, and throughout the country maternity centres and infant clinics are being established, mainly by voluntary effort. Naturally the extent of such effort varies throughout the country, and the action of the Carnegie Trust is a laudable attempt to make a complete survey of the whole subject. Dr. Hope, the well-known sanitarian, who is Medical Officer of Health for Liverpool, and Dr. Janet Campbell, an official of the Board of Education, are conducting an inquiry, on behalf of the Carnegie Trust, the object being to obtain accurate information as to the provision already made or in immediate contemplation in various public health areas for the care of mothers and infants. A schedule has been sent to all medical officers in England and Wales, asking information on essential points, *e.g.*, conditions of general sanitation, housing accommodation, employment of women, and the nature of the industries of the locality. Figures will be tabulated to show the birth-rate at successive periods, the causes of infantile mortality, and other requisite information. A record is asked of the size and work of the M.O.H.'s staff, of hospital facilities, and of the measures taken to secure a pure milk supply. We have only partially indicated the scope of the interrogatories, but it is obvious that the results of such an inquiry will be of great importance, and may well form the basis of future legislation. The success of the scheme very largely depends on the cordial co-operation of the medical profession, and especially of the Medical Officers of Health. Such support, we feel sure, will be given in full measure.

PERSONAL.

The King has been graciously pleased to appoint Dr. John B. Story, M.B., F.R.C.S.I., to be Honorary Surgeon-Oculist to His Majesty in Ireland, in the room of Dr. Charles Edward FitzGerald, deceased.

Lambeth Council have publicly thanked Dr. Eleanor Gorrie for the able manner in which she has carried out her duty as *locum tenens* at the municipal tuberculosis dispensary for six months.

Surg. C. W. Lewis, who went down in the *Queen Mary*, was well known in Edinburgh. A son of Professor Lewis, of Cape Town, he graduated M.B., Ch.B. at Edinburgh University in 1914. Later he joined the Navy as a temporary surgeon.

At the investiture ceremony held at Buckingham Palace by the King last week, Midshipman Henry D. Johnston, R.N., was one of the recipients of the Distinguished Service Cross. He is a son of Dr. M'Kenzie Johnston, Consulting Surgeon for Diseases of the Ear and Throat at the Royal Infirmary, Edinburgh.

Mr. F. N. Molesworth, solicitor, coroner for the Rochdale Division of Lancashire, has been unanimously elected President of the Coroners' Society of England and Wales for the ensuing year, and Dr. F. J. Waldo, coroner for the City of London and Borough of Southwark, has been elected Vice-President.

Surgeon-General T. P. Woodhouse, C.B., M.R.C.S., has been appointed a Knight of Grace of the Order of St. John of Jerusalem in England. He won Brevet promotion in the Royal Army Medical Corps for good work in the Boer War, and has received the Order of the Bath for the present campaign.

THE CHADWICK TRUST LECTURES.

LECTURE I.—PROCESSES OF DISINFECTION.

By PROF. SHERIDAN DELÉPINE, M.B., C.M., M.Sc.

Director of the Public Health Laboratory, University of Manchester.

Introductory Remarks.—The lectures which the Chadwick Trustees have asked me to deliver are concerned with some aspects of the prevention of disease; their object is therefore in harmony with the life work of the distinguished pioneer in whose memory these lectures have been instituted. The subjects which have been selected are of importance both to the soldier and to the civilian. Prevention of disease in the Army is based upon general principles that are applicable to any other community, but, of the methods based upon these principles, some which are suitable for a fixed civil population are not so well adapted to the circumstances of an army in the field. Some of the subjects we have to deal with are of a highly technical nature. I hope, however, to be able to place before you some interesting facts and considerations without troubling you with many abstruse terms.

To avoid the confusion which would be caused by mentioning the names of a large number of observers, many of whom are foreign, I will, though with regret, refrain from mentioning the workers to whom we are indebted for the discoveries which will be referred to. I regret this omission all the more in that most of the important discoveries to which I will have to allude are due to British, French, and Russian observers.

Infection and Disinfection.

In the restricted medical sense, a person is said to be infected when harbouring some living animal or vegetable organism capable of producing disease. Such a person may be the means of infecting other persons by transmitting to them the infective organisms or disease germs. This transmission may be direct, by contact of person to person, as is usually the case with syphilis, or it may be indirect, as most commonly happens in typhoid fever, when the secretions, excreta or some other discharge from the infected person contaminate water, food, clothing, etc., which are afterwards used by other persons. The object of disinfection is to kill, or at least to render harmless, the infective organisms. As knowledge of the causes of infectious diseases has advanced the importance of indirect transmission has become more and more evident. This applies to such prevalent diseases as tuberculosis, typhoid and allied fevers, cholera, plague, tetanus, typhus, malaria, relapsing fever, etc.

The disinfection of infected persons is the object of certain methods of treatment, but disinfection, as generally understood, is chiefly applicable to the intermediaries, such as water, food, clothing, bedding, etc., by which disease may be transmitted from one person to another. This is of particular importance as regards to armies in the field.

General sanitary measures by which infection from person to person, infection of food, clothing, water, soil, houses, etc., is prevented, are undoubtedly more satisfactory than disinfection after infection has been allowed to take place; but a moving army cannot always choose its camping grounds, and have the benefit of methods of prevention which are applicable to stationary populations. It is on that account that disinfection acquires a special importance in military hygiene.

Processes of disinfection must vary according to the nature of the infective agent and of the infected object or person. Thus destruction by fire which is undoubtedly a most efficient method is obviously inapplicable to the disinfection of living persons or valuable articles. The practice of disinfection is also determined by the ways in which infective organisms are transmitted from person to person, and as this varies according to the disease, a knowledge of the modes of infection must serve as a guide to the practice of disinfection. I propose, therefore, to discuss some of the most important processes of disinfection from the last point of view, and to do so in the time at my disposal I will select a few typical diseases.

Disinfection of the Person.

Syphilis is an instance of a disease which is almost always transmitted directly — *i.e.*, by the contact of one person with another. It is due to a protozoon called Treponema pallidum, which is found abundantly at the seat of infection and in the secondary lesions which are produced in various parts of the body. The treatment of this disease has for its object the killing of the parasite where it is located—that is, in the midst of the living tissues. Mercurial preparations, which have been used empirically for a long time, and various arsenical compounds which have come more recently into use, have that power, but most of these compounds are almost equally poisonous to certain cells of the individual treated as to the parasite. The careful experimental studies which have been conducted, both in this country and abroad, have revealed the fact that certain organic compounds of arsenic combine more readily with the Treponema than with the cells of the infected individual, so that by careful regulation of the amount administered it is possible to kill the parasite without seriously damaging its host. Treatment in this case, if completely successful, results in disinfection of the individual.

There is a remarkable resemblance between this method of treatment and the most primitive ideas regarding the treatment of disease. The contortions of the medicine man, the incantations of mediæval wizards, the herbs collected by wise and other women were all supposed to clean the body of disease, or devils which had taken possession of it. There are other animal parasites which can be dealt with in this way; among these is the Treponema causing yaws; the spirilla of relapsing fever of which European, American, African and Asiatic varieties have been described, are also affected by the same method of treatment which has also been used for sleeping sickness, a disease due to another group of protozoa, the Trypanosomes. In these diseases, however, transmission takes place through the intermediation of biting insects, so that the diseased individual is not the only field where the parasite can be attacked.

In the case of malaria, quinine has for a long

time been used for purposes of treatment, and its value is due to its specific action on the protozoa which cause the various types of malaria. Insects play also an essential part in the transmission of this disease. A knowledge of the life history of the parasite of malaria has led to methods one of which may be looked upon as based upon a process of disinfection. When a person is bitten by a mosquito a small spindle-shaped body, which constitutes one of the stages of development of the malarial parasite, is introduced into the wound with the salivary secretion of the insect; these parasites penetrate into the red corpuscles of the blood, then pass through various stages. A person whose blood is infected in this way is not, in ordinary circumstances, directly infectious to other persons, but when certain mosquitoes suck the infected blood, some of the parasites which are present in this fluid undergo further development in the walls of the stomach of the mosquito, and this ends in the formation of a large number of small elongated spindle-shaped bodies, many of which migrate to the salivary glands of the insect ready to pass with the saliva into the wound produced by the mosquito in the skin of its next human victim, who thus becomes infected.

Protection against mosquito bites, by the use of the mosquito net, may be looked upon as based upon the disinfection of air by filtration through muslin. The destruction of the larvæ of mosquitoes capable of transmitting the malarial organisms has been used in certain localities to prevent the spread of the disease, and this is effected by an interesting process. The mosquitoes in question belong to the genus Anopheles; the females lay their eggs in pools, or other collections of clear water; the larvæ arising out of their eggs float immediately under the surface of the water, and after undergoing various changes produce the perfect insect. If a thin layer of paraffin or some other oil is spread on the surface of pools in which larvæ are developing; and if this layer persists for at least half an hour, the larvæ are killed. It is obvious that draining off of all collections of water where larvæ can develop is still more effective. The reduction of the number of mosquitoes is followed by a diminution in the chances of infection. The destruction of a possible intermediate host before it has been able to act as a carrier of disease is certainly a process of disinfection as far as the water is concerned, but differs from others in that it does not deal with the disease-producing organism itself.

I shall have to speak more fully of the destruction of animal conveyors of infection. I must now refer to a process of disinfection of living tissues which is an adaptation of a natural process of defence against infection. The methods which I have alluded to, up to now, have been successful, in a practical sense, only in the case of diseases conveyed by inferior animal organisms, but lower plants known as bacteria, and which cause such diseases as tetanus, gaseous gangrene, anthrax, tuberculosis, typhoid fever, cholera, plague, etc., have so far proved more resistant to the direct action of chemical disinfectants than the tissues which they are infecting.

Up to now it has been found unsafe, in most diseases, to attempt to kill the bacteria infecting a person by administering chemical compounds having power to kill the infecting bacteria by their direct action. Compounds of iodine, salicylic acid and of some other substances may be said to be exceptions to the general rule, but even if it were so, this would not affect the general statement which I have made as to the state of our present knowledge. But what we have so far failed to do by means of our purposely made drugs, the cells of which we are built up have for millennia done without our knowledge. It is only during the last forty years that our attention has been awakened to the importance of this work. Since then we have gradually learnt how to utilise the activities of those silent workers which have time after time protected us against infection.

The discovery of the means of harnessing our own cells for purposes of defence against disease germs forms the subject of some of the most fascinating chapters of modern pathology and therapeutics. Generally speaking, the methods to which I have just referred were primarily based upon the recognition of the fact that certain persons or animals are able to resist some infections and that an attack of some infectious diseases confers immunity from subsequent attacks. It was then found that this immunity was the result of the action of certain cells, some of which, known under the name of phagocytes, are capable of attacking, killing, dissolving or digesting directly, the infective germs causing the disease. In other cases the germs are acted upon by products circulating in the fluids of the body and which have the property of killing and even actually dissolving the invading germs. These substances which are said to be lysogenic or bactericidal are undoubtedly the products of cellular activity and give to the living cells the power to do, indirectly, what phagocytes can do in a more obvious and direct fashion. Certain cells and their products have, therefore, the power to disinfect more or less completely and rapidly infected living tissues.

What modern pathologists have learnt in the past few years is to take advantage of these natural properties and to increase by artificial methods the power which the cells have to fight and destroy infective organisms by direct or indirect processes of disinfection. This is one of the objects of preventive vaccination or inoculation. There are other aspects of this subject which do not fall under the head of disinfection and are outside the scope of this lecture. I need only mention vaccination against small-pox and against typhoid fever to remind you of the extent to which this method has been applied in the Army and of the great benefits which have resulted from this procedure.

Before concluding these general remarks upon disinfection of the person, I should say a few words about disinfection of the skin and of those cavities of the body opening on its surface. Complete disinfection of the skin though distinctly easier than that of internal living tissues is a matter of great difficulty.

Thorough scrubbing with soap and water, rubbing with alcohol and then washing with a solution of perchloride of mercury, is a method which has been used extensively by surgeons to disinfect their hands before operations. This process, which takes at least ten minutes when carried out thoroughly, should be repeated when the hands have been exposed to serious contamination. Solutions of hypochlorites (chlorinated lime or chlorinated soda) are more efficient than perchloride of mercury. A solution of iodine has also been used extensively for disinfecting the skin in regions where incisions have to be made for operative purposes. Even with these strong germicidal substances complete sterilisation of the skin is seldom obtained, but the superficial contaminations are removed, and this generally secures the necessary disinfection. Thorough washing of the hands with soap and water, with or without the weaker anti-

septics, such as Condy's fluid, carbolic acid, cyllin, izal, and many other popular disinfectants, is generally considered sufficient under ordinary circumstances.

The destruction of such vermin as fleas, lice, bed-bugs, itch-mites, which can convey disease from one person to another, may in some cases be effected while these parasites are located on or in the skin; this is specially the case with regard to itch-mites and lice. Petrol, paraffin oil, turpentine, benzine, carbolic acid, etc., have been found efficient in the treatment of the hair and skin. The lathering of the skin, more especially of the hairy parts, with cresol-soap and allowing afterwards the lather to dry on the skin, is another method. Sulphur and mercury are much older remedies, which still remain among the best. This is particularly true of sulphur and certain sulphur compounds in the treatment of itch. But with regard to fleas, bed-bugs, and body-lice, they are best attacked in their haunts outside the body of their victims. This will be referred to in another place.

Disinfection of cavities (as the alimentary canal), lined with soft mucous membranes by the direct action on bacteria of chemical disinfectants is practically impossible. The only thing that can be hoped is to obtain by these means reduction in the number of objectionable bacteria. This result is usually better obtained by natural means as when the alimentary canal is kept freely opened, foods favouring the development of certain bacteria are avoided, and beneficial organisms, such as some of those producing lactic acid fermentation, are caused to develop extensively in the intestine, thereby checking the multiplication of noxious bacteria; but none of these methods can be properly described as based upon processes of disinfection.

The difficulty of disinfecting the mucous membranes renders the task of dealing with carriers a complicated matter. These are persons who, after recovering from an infectious disease, continue to harbour infective bacteria in their nasal cavities, throat, alimentary canal, kidneys, bladder, etc. These bacteria may also flourish in persons who have apparently never suffered from the disease. "Carriers" play an important part in the dissemination of such diseases as diphtheria, scarlet fever, typhoid fever, and many other infectious diseases. They are best dealt with by segregation, lengthy treatment and careful watching.

As to the disinfection of wounds, it is now recognised that this cannot be satisfactorily effected by chemical compounds capable of killing bacteria by their direct action. If these substances were used in such quantity as to secure the death of bacteria, the damage done to the tissues would be so considerable as to make the remedy worse than the disease. The disinfection of wounds must be entrusted to the cells and fluids of the body; the action of these can be stimulated in various ways, some of which have been already discussed. Several of the antiseptics which have been so extensively used under the erroneous impressions that they were acting directly upon bacteria, undoubtedly owe their beneficial effects more to the action they have upon the tissues than upon their power of killing the bacteria present in wounds.

DISINFECTION OF EXTERNAL CONVEYORS OF DISEASE.

By external conveyors of disease, I mean anything, animate or inanimate, by which infective bacteria may be conveyed from a diseased person to one or more persons who thereby become specially liable to the disease caused by the infective germ.

In order to understand the ways in which these intermediaries act, it will be best to consider what may happen in connection with a case of typhoid fever. The bacillus typhosus which causes this disease may be conveyed to any part of the body by the blood stream. It is present in large numbers in the intestine and also sometimes in the urine and in other secretions or discharges, with which it escapes from the body of the typhoid patients. In this way, it may contaminate the clothing, bedding, utensils and other articles used by the patient, also the drainage and sewage issuing from a house, hospital or town. Imperfect disposal of excreta from houses in urban or rural districts or in connection with camping grounds, trenches, etc., may lead to accumulations of highly infectious matter in temporary middens or cesspools. Soil and water may be extensively infected by this material, either as a result of simple overflowing, or when the infected excreta are spread on various lands for the purpose of either simple disposal or cultivation. Through these various intermediaries a single case of typhoid fever may be the means of infecting a large number of persons.

The persons attending the patient or handling their linen, may, if not of clean habits, infect their hands and clothing, and in this way convey infection to milk, broth, jellies, ice-creams, etc. The patients themselves, when well enough to move about, are dangerous centres of infection, and this is specially true of persons harbouring the bacillus without showing any clear evidence of illness; these carriers are a source of serious danger.

Flies are to be feared for similar reasons. After crawling and feeding on infected refuse or excreta they come into houses and alight on various articles of food, such as milk, broth, etc., which they contaminate with typhoid bacilli. When the temperature and the articles are suitable these typhoid bacilli may, even when originally very few, multiply rapidly and render the food infectious. It is even held that when the flies are sufficiently numerous they may carry enough bacilli to produce infection.

The dust from infected articles or soil may be a source of dangerous contamination. Vegetables grown on polluted ground, shell-fish laid in infected estuaries, are also sources of human infection.

Infected water may be a conveyor of disease when it is used to clean vessels which are afterwards used to hold various articles of food in which the typhoid bacillus may multiply. When highly infected, the water itself may be directly infective. All this is not special to typhoid fever, but may be said with equal truth of other infectious diseases such as various forms of summer diarrhœa, food-poisoning, dysentery, Asiatic cholera and all other diseases in which excreta and other discharges contain, at some stage of the disease, the infecting agent. The disease germs may be disseminated chiefly through the agency of biting insects which suck the blood of the infected person, and afterwards bite other persons and infect the wound either directly or by means of their excreta or other discharges deposited in the neighbourhood of the wound.

In the case of bubonic plague the contamination of flea-bites by the excreta of infected fleas seems to be the commonest mode of infection.

In India the black rat (which is liable to plague epizootics) is the ordinary source of infection, and the rat-flea, which is capable of attacking man, is the carrier of the disease from rat to man. The body-louse conveys exanthematous typhus and relapsing fever. Bed-bugs have been accused of being the means of transmission of several infectious diseases, but this does not seem to have been proved satisfactorily, except, perhaps, in the

case of relapsing fever. The itch-mite is dreaded, not as a conveyor but as the actual producer of the very troublesome disease known as itch.

The examples which I have given will be sufficient to indicate some of the objects of disinfection, in what cases and under what circumstances it may be applied, and consequently what processes are likely to prove efficient. They show that it may be considered desirable to apply processes of disinfection to :—

(1) The internal tissues or the integuments of an infected person (either patient or carrier).
(2) The excreta and other discharges.
(3) The clothing, bedding and various fabrics.
(4) Various utensils and other objects.
(5) Water.
(6) Soil and dust.
(7) Various animal and vegetable articles of food.
(8) The destruction of various kinds of animal vermin, including intermediate animal hosts and carriers, should also be considered.

It will be obvious that if infected excreta and personal effects are allowed to pass out of the vicinity of the infected person the problem of disinfection becomes extremely complicated. Thus when excreta have been allowed to accumulate about a camp and to contaminate extensively the ground, dust, flies, and water, disinfection would be so costly and uncertain that the simplest way to deal with the difficulty would be to shift the camp, but this is not an ideal way of dealing with infection, nor is it always a possible one.

The complete disinfection of infected soil is, except when the infection is very recent and limited, practically hopeless, and must be left to natural agencies, such as light and dryness, assisted, when possible, by ploughing, drainage and the addition of large quantities of quicklime, chlorinated lime or other powerful disinfectants the addition of which may also be beneficial to the soil.

Disinfection of water supplies at home should always be rendered unnecessary by protection of the sources against pollution, but as this is not always found possible, purification of water by slow sand filtration or rapid coagulation and mechanical filtration are generally resorted to. Of late years disinfection of water by ozone, hypochlorites, ultra violet light, etc., has been adopted in various places. But these methods do not meet military requirements, except in garrison towns and barracks. For an army in the field the methods of sterilisation which have been found to be the most practicable are those based upon :—

(*a*) Filtration of water through unglazed china, or other finely porous earthenware.
(*b*) Sterilisation by heat.
(*c*) Chemical treatment.

Of these, sterilisation by heat is the most reliable if properly carried out, but in order to obtain a sufficient amount of palatable, moderately cool water, cumbersome and heavy apparatus is needed. This is specially the case with French and German sterilisers. In the British Army some comparatively light apparatus has been used in which water is partly sterilised at a temperature below the boiling point. Each soldier might also boil water for his own use when circumstances permit it. The fuel may be a source of difficulty in the field.

Sterilisation by filtration through portable filters is slow when effective, and to obtain a sufficient yield it is necessary to use large batteries of porous candles and also pumps forcing the water through the filters under a pressure of some 40 lbs. to the square inch. This kind of filter stops bacteria entirely for a few days only, after which cleaning and sterilisation of the filter are necessary in order to restore full efficiency. The necessity of frequent sterilisation, the comparative slowness of action and the weight of an installation sufficient for a large number of men, render the use of these filters difficult in the field. Portable rapid filters are unreliable and their efficiency is inversely proportional to their rapidity. These filters, however, remove many objectionable coarse impurities and some of the larger infective organisms, such as animal parasites, so that rapid filters are not without their use. Whenever applicable, good filters give excellent results, and their use has caused great reduction in the occurrence of water-borne disease in various armies.

Chemical treatment at first sight appears to have the advantage of convenience, provided always that a sufficient supply of the necessary chemicals is available. The best of these methods are based upon the well-known germicidal actions of chlorine and hypochlorites, bromine and iodine. Sodium bisulphate has also been proposed. If the waters to be treated were not, as they generally are, loaded with organic impurities, it would be easy to add the disinfecting agent to the water in such amounts as to secure sufficient disinfection without rendering the fluid unpalatable owing to the flavour imparted to it by the disinfectant. Unfortunately, the action of several of the chemicals used is comparatively slow, the waters to be purified very often contain a large amount of organic matter, and this amount is variable. The organic matter is acted upon by the disinfectant before the living bacteria are attacked by it; so that the amount of chemicals necessary to ensure disinfection should generally be greatly in excess of what would be required in the case of moderately pure water. Moreover, the proportion of disinfectant would have to be determined by the amount of oxidisable matter other than bacteria in each water. Until these difficulties have been overcome the addition of chemicals cannot be said to be an absolutely reliable process of disinfection of water for armies in the field. Notwithstanding this, chemical sterilisation should not be neglected when better methods are not available, for there is no doubt that a very small proportion of chlorine, bromine or iodine is sufficient to kill some organisms of low resistance, such as the bacillus typhosus and the cholera vibrio.

What has been said with regard to the disinfection of water by chemical means applies with greater force to the disinfection of excreta, soil, clothing, etc. With regard to soil and excreta, we have already seen that the free use and thorough admixture with the excreta of quicklime, or, better still, of chlorinated lime or chlorinated soda is useful, but popular disinfectants, such as tar products, carbolic acid, cresols and phenoloids, would have to be used in enormous quantities to obtain fully the result wanted. They have the advantage of reducing the number of flies, a result which can also be obtained by the use of mineral oil. The deep burial of fæces as practised, when possible, removes the danger of dissemination of disease by flies but may result in the infection of the water supply, if proper care is not exercised.

The prevention of malaria by the disinfection of pools infected by mosquito larvæ has been given as an example of a process of preventive disinfection. The removal, treatment, or destruction of manure and other breeding grounds of the house-fly have a similar object with regard to other diseases, such as typhoid fever and summer diarrhœa. The destruction of lice and their eggs in infected clothing, bedding, etc., is a more direct method of disinfection, particularly useful in the prevention of

typhus and recurrent fever, without speaking of the comfort of our soldiers. For this purpose a powder, of which the chief ingredients are naphthalene and creosote, and ointments containing respectively crude tar oil and mercury, have been used with success, although it is obvious that their action is too local and too slow to prevent migration of the parasite from person to person in crowded dug-outs. Various gases have been recommended for the disinfection of verminous clothing. Of these sulphurous acid is the only one which can be used safely and with fairly good results, but it penetrates slowly. Formaldehyde and chlorine are less efficient. Disinfection of clothing, blankets, etc., will be referred to again in connection with the use of heat, when the relative value of various agents will be discussed.

The prevention of plague, destruction of rats and of their fleas is a matter of primary importance, but is, unfortunately, difficult of attainment. Bacterial viruses have been used with variable success. Cats, ichneumons, dogs, have been called into the service of man. The professional rat-catcher has his share in the crusade against rats, which in Denmark has for some time received the support of the State.

ORIGINAL PAPERS.

HYPERTROPHIC VENOUS CIRRHOSIS.

By PROF. D. CASTAIGNE, M.D.,
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[SPECIALLY REPORTED FOR THIS JOURNAL.]

I AM enabled to show you four patients, two women and two men, who have come to the hospital during the past week, all four suffering from venous hypertrophic cirrhosis with a variable degree of ascites.

This is not a mere clinical coincidence but is to be explained by the frequency of this particular disease, a frequency which is proportional to the prevalence of chronic alcoholism, its commonest cause. We must not forget, of course, that this affection may be due to other causes, but the fact remains that alcohol is usually the source of the mischief.

Hypertrophic venous cirrhosis is of comparatively recent birth as far as medical science is concerned. When Charcot established his classification of cases of cirrhosis he described two main types, on the one hand venous atrophic cirrhosis, corresponding to Laennec's cirrhosis, not accompanied by jaundice and of alcoholic origin, and on the other, biliary hypertrophic cirrhosis which is associated with jaundice, the cause of which is still unknown to us.

This conception long commanded assent, but, later on, Hanot and Gilbert showed us that alongside Laennec's atrophic cirrhosis there is a hypertrophic venous cirrhosis also of alcoholic origin.

Still more recently attempts have been made to discredit the necessarily alcoholic origin of this form of cirrhosis and to incriminate tuberculosis, syphilis and other infections. The investigation of these four cases is particularly interesting in reference to the share of the various factors in the genesis of the disease.

The characteristic feature of the disease is, to begin with, the marked enlargement of the liver. In most instances it reaches three or four fingers' breadth below the false ribs In one of our patients, in presence of extensive eventration and the temporary absence of ascites, it happened to be particularly easy to make out a hard, granular liver with a thickened edge.

In these four patients percussion also reveals an enlarged spleen which can be felt below the ribs. This increase in size of the spleen is also an habitual sign in venous hypertrophic cirrhosis. The same remark applies to the collateral venous circulation which should always be looked for. This is more marked under the influence of fatigue and subsides more or less with rest and milk diet.

The belly is distended and prominent when the patient stands up, being rounded and globular, whereas, when he lies down, it assumes the classical batrachian shape (frog's belly). This is the case, at any rate, when there is ascites, and ascites is part of the ordinary syndrome of hypertrophic cirrhosis, though it may be wanting. Our four patients, however, all present, or have presented, ascites.

This woman, it is true, has no ascites at present, but when she was admitted for the first time, in 1912, she was punctured, and then withdrew seven litres of fluid. The puncture was repeated six months later.

These patients not unfrequently have an easily reducible umbilical hernia. One of our patients has this and, exceptionally, it is irreducible. The patient therefore is running the risks associated with strangulated hernia and, as happened in another of my cases, it provides a slit through which the fluid escapes, thus throwing open the door to possible infection. It is therefore advisable to perform the operation for radical cure under local anæsthesia, for not only will it obviate the risk of infection, but it will serve to evacuate the ascitic fluid.

The history of these four patients, on the other hand, shows that the venous hypertrophic cirrhosis runs a much slower course than atrophic cirrhosis. Once the latter is constituted it does not leave its victim much rest, whereas here, on the contrary, we have a patient whose general health is not by any means unsatisfactory, and who merely comes to us every year or two for the relief of the ascites.

When patients can be induced to adhere to a strict regimen the ascites disappears, and they imagine themselves cured, but, in reality, the cirrhosis is simply running its course without ascites. Then portal circulation is hampered, and this may lead to intestinal hæmorrhage which may cause death.

The symptomatology of these cases may consequently be summed up as follows: more or less hypertrophy of the liver, which is hard and granular; the spleen is similarly increased in size and can often be felt on palpation and always by percussion. There is marked collateral venous circulation and other signs of heightened portal tension, especially troublesome piles. Lastly, these patients present more or less profuse ascites which, however, may be lacking for long periods. The course of the disease is less threatening than in atrophic cirrhosis, and it is compatible with prolonged life.

We must not on this account jump to the conclusion that hypertrophic cirrhosis is a mild disease. There are other forms of cirrhosis, also venous and hypertrophic, which run a rapid course, especially fatty cirrhosis, which is also manifested by a hard, enlarged liver, ascites and collateral circulation. Early in the case it may be difficult to distinguish these so-called malignant cases from the simple form. It may be necessary to have the patient under observation for some time in order to watch the evolution of the symptoms.

As a general rule, as soon as we perform paracentesis, the symptoms improve and the patient is able to leave the hospital and return to work, in which event we are dealing with a benign hyper-

trophic cirrhosis capable of improvement under diet and treatment.

In the graver cases, in spite of puncture, the patient becomes prostrated and has no desire to leave hospital. There is often bleeding from the gums or mucous surfaces or nose, the temperature is somewhat above normal and there is subdelirium. These symptoms justify a grave prognosis and infer a rapid course.

These four cases belong to the mild forms and the patients' future may be looked forward to with confidence if only they will follow our instructions. We will now pass on to the question as to the origin of the disease in these cases.

I have pointed out that the exclusively alcoholic origin of the disease has been contested and that tuberculosis and syphilis have been incriminated. It was Jousset who set himself the task of proving that this cirrhosis was of tuberculous origin. He based his conclusion on the observed fact that guinea-pigs could be tuberculosed by inoculating them with ascitic fluid from these cases or with bits of the liver, and, lastly, examination of such patients often revealed the existence of tuberculous lesions in the lungs or tracheo-bronchial glands. Unfortunately, this line of argument is open to destructive criticism, because it would not be surprising that an alcoholic subject should contract hypertrophic cirrhosis and should secondarily become tuberculous.

As to the ætiological part played by syphilis, the Wassermann reaction has been found positive in these cases, but here again there is no incompatibility between cirrhosis and syphilis, each running its own course, though the latter may well exert a prejudicial influence on the former. Be this as it may, the fact remains that alcohol is by far the preponderating ætiological factor in the production of venous hypertrophic cirrhosis.

In all our four patients we have obtained their admission of ethylism, and they present the characteristic features. One has chronic matutinal waterbrash, another has terrible nightmares with a commencement of polyneuritis and marked tremor, a third has an even more pronounced tremor with a history of several attacks of delirium tremens, and so on.

With regard to the other possible causes of venous hypertrophic cirrhosis one displays signs of pulmonary bacillosis (a euphemism for tuberculosis), and another has had an indurated chancre but was properly treated and now shows no sign thereof.

In short, alcoholism is the chief, and probably the only, ætiological factor, and this will guide us in our treatment. These patients will only recover on condition that they abstain from every kind of alcoholic beverage, whether wine or cider, and it would be unwise to allow them to suppose for one instant that tuberculosis or syphilis had anything to do with their condition, otherwise you will not get them to adhere strictly to the dietetic restrictions.

A URINARY TEST FOR SYPHILIS AND ITS COMPARISON WITH THE WASSERMANN REACTION.

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The form and variety of symptoms, either recent or remote, that may be produced by the *Treponema pallidum* are multiple. This same parasite causes certain metabolic changes in the human body, as is shown by the different laboratory methods, *i.e.*, the Wassermann reaction, the gold chloride test, and the luetin reaction. With the exception of the latter, these tests require a well-equipped laboratory and reagents which are not within reach of the general practitioner. That some simpler test may be used which will at least strengthen or weaken the question in the physician's mind, is very probable. I wish to report a series of urinary examinations, part of which have been carried out in common with the Wassermann reaction.(*a*)

The test is simple, requiring only a few test tubes, one of which must be graduated in cubic centimetres, and two stock solutions. A specimen of fresh urine, acid in reaction and normal specific gravity, *i.e.*, above 1.016. A test for sugar, even in the smallest amount, should also be made, as its presence will interfere with the reaction. The reagents consist of: Solution I, dissolve 1 gram of resublimed iodine in chloroform or carbon tetrachloride; Solution II, phosphoric acid 10 per cent. To perform the test take 6 c.c. of fresh urine, preferably the early morning, and add 1 c.c. of Solution I and shake thoroughly for two or three minutes. The reaction depends upon some substance which inhibits the decolorisation of the iodine. After urine and iodine solution have been thoroughly shaken, the tube is set aside for a few moments, when the chloroform will settle to the bottom, being either pearly white (a negative reaction) or coloured pink or deep purple, when the reaction is positive and syphilis is to be suspected. One cubic centimetre of Solution II is then added, and the tube and contents are shaken the second time. If the chloroform is cleared and becomes white after standing three or five minutes, the test is negative.

The presence of sugar, even in the slightest trace, will produce a positive reaction, as has been proven by the examination of diabetic urines, and also by producing temporary glycosuria in healthy individuals whose urine had given negative tests and gave further negative reactions after eliminating a superabundance of carbohydrates from the diet.

A low specific gravity urine of the type produced by ingesting large amounts of water or the so-called "nervous polyuria" will give a positive reaction. To prove this, examinations of fresh urine from normal persons were made and were found to be negative; then later in the day, after several hours of labour with little or no water ingested, followed by copious drafts of fluid and a relaxation from mental strain, a second examination gave a positive reaction. This was illustrated in the case of several physicians after several hours' work in the operating room and in students following examinations. A positive result may also be caused by drinking one or two bottles of beer within a few hours of making the test. It seems necessary to inquire regarding the use of alcohol in this test for the same reason that it is necessary before taking blood for a Wassermann, the reverse result occurring in the urinary reaction. The presence of albumin, bile, indican, or blood has no influence upon the reaction. Cystitis, due to staphylococci, streptococci, pneumococci, or colon bacilli does not give rise to a positive reaction. Nor does gonorrhœal urethritis unless complicated with a chancre. The reaction has been obtained from the urine of five patients where the diagnoses were made by finding the spirochætes with the dark field illumination. In other cases the diagnosis has been from the history and clinical finding alone or as controlled by the Wassermann

(*a*) *New York Medical Record*, May 6th, 1916.

reaction. In two cases all three of these reactions were positive without any history of infection obtainable, the only lesion showing in the mouth.

TABLE I.

Diagnoses	No. Cases	+	—
Syphilis	50	50	0
Surgical conditions	55	1	54
Tuberculosis	15	0	15
Glycosuria	5	5	0
Pneumonia	5	0	5
Gonorrhœa and chancre	2	2	0
Septicæmia	10	0	10
Gonorrhœa	5	0	5
Kidney disease	15	0	15
Scarlet fever	2	2	0
Carcinoma	3	0	3
Healthy individuals, controls	13	0	13
Polyuria of nervous origin	5	5	0
Polyuria produced by the use of diuretics	10	10	0
Typhoid fever	5	0	5
	200	75	125

This short report is based on investigations made only during the past five months, but a glance at the two tables will give a slight idea of the results obtained. Urinary examinations were made in two hundred cases from patients suffering from different diseases as diagnosed under Table I., while it was possible to make a Wassermann for comparison, as is shown in the thirty-five cases in Table II. It has not been possible to obtain urines from cases of every description, and it is very likely that a more thorough investigation will show other conditions besides those noted below which give the reaction. With the results obtained it would seem that, while the test does not afford a positive diagnosis for syphilis, it has its place in the examinations, and in certain cases might aid greatly in determining a more elaborate test.

The cause for the reaction is unknown as far as I have been able to determine. Physiological chemistry has not as yet solved all the problems or given cause for all reactions that occur. From results obtained in different tests we assume that certain substances, in some unexplainable manner, react with other substances and cause a definite result.

For illustrative purposes, I will cite a few case histories for comparison of the results tabulated in Table II.

CASE I.—J. R. D., man, age 31, widower. Wool sorter. Family history, negative as far as obtainable. Has three sisters, four brothers living and well, although one brother, aged 43, is nearly blind. Has always been in good health, never been under treatment for any cause. Complains of difficulty in seeing things after dark. First noticed this about five years ago. Onset gradual and vision perfect during the day. Examination showed the lids, sclera, cornea, and pupils normal. Through the ophthalmoscope both discs were pale, the vessels small, and pigmented areas all over the retina. O.D.V.=1. O.S.V.=1. Clinical diagnosis of retinitis pigmentosa O.U. was made. Urinary test was very positive and the Wassermann showed + + +. Under mixed treatment improvement was marked in three months.

CASE III.—V. M., woman, age 18. Single. Bookkeeper. Family history: Father living, in poor health, cause of which the patient does not know. Mother died eight years ago of tuberculosis. One brother and one sister living and well. Four brothers and three sisters died soon after birth,

TABLE II.

Case	Clinical Diagnosis	Specific History	Iodine Test, Urine	Wassermann
1	Retinitis pigmentosa	None obtained	+	+++
2	Uveitis acuta specific	None obtained, except for an attack of rheumatism	+	+++
3	Interstitial keratitis and iritis specific	None obtained	+	+++
4	Interstitial keratitis and iritis specific	None obtained	+	+++
5	Interstitial keratitis	None obtained	+	+++
6	Interstitial keratitis	None obtained	+	+++
7	Interstitial keratitis	Chancre and rash in 1898, 2½-yr. treatment	+	—
8	Iritis	None obtained	+	+
9	Interstitial keratitis	None obtained	+	++
10	Paralysis, third nerve	None, except for a rash a couple of years before	+	+++
11	Interstitial keratitis specific	Gumma of clavicle three years before. Received 2.1 gm. neosalvarsan. Took mercury for several months 14 years before	+	—
12	Paralysis third nerve specific	None obtained	+	++
13	Parenchymatous keratitis	None obtained. Has typical notched teeth	+	++
14	Paralysis external rectus specific	Severe sore throat and rash two years before. Two miscarriages.	+	+++
15	Absolute glaucoma	None obtained	+	+
16	Scleritis conjunctivitis	None obtained	—	—
17	Paralysis of superior oblique and inferior rectus	Attack of grippe about a month before	—	—
18	Parenchymatous keratitis	None obtained	+	+++
19	Episcleritis	None obtained	+	—
20	Chancroid	Sore on glands two years before. Bubo	+	+++
21	Not reported	None obtained except for three miscarriages at two months	+	+
22	Gumma of neck	Chancre several years before	+	+
23	Interstitial keratitis	None obtained	+	+++
24	Secondary syphilis	Ulceration of cervix and labia. Rash of face and body	+	+++
25	Interstitial keratitis	None obtained. Hutchinson's teeth	+	+++
26	Neurochoro-retinitis	None obtained, except for a sore throat a year before and slight rash on chest	—	—
27	Keratitis	None obtained	+	—
28	Neuroretinitis	None obtained	+	—
29	Interstitial keratitis and iritis	None obtained	+	—
30	Interstitial keratitis and iritis	None obtained. Hutchinson's teeth. Prominent frontal bone. Skin of hand dry and wrinkled	+	+++
31	Interstitial keratitis	None obtained	+	+++
32	Gumma of neck	None obtained	+	+++
33	Syphilis primary	None obtained. Mucous patches on labia	+	+++
34	Syphilis of throat	None obtained. Mucous patches in throat showing spirochæta enlarged glands	+	+++
35	Keratitis and iritis specific	Rash three years ago	+	+++

cause unknown. Always been well till March, 1915. Has had severe frontal and occipital pain the last six months and lost some weight. Has lost all her teeth. Last March the left eye began to get red and painful. Photophobia. Vision lost within a week. Was in Canada at that time but returned home in the summer. In August the right eye ran the same course, and she lost weight and became almost totally blind. Entered hospital first of November. Examination showed the cornea dull, with dense infiltration. Pupils contracted. Deep circumcorneal injection. Perception of light only. Clinical diagnosis of interstitial keratitis and iritis. Urinary test positive. Wassermann + + +. Under treatment marked improvement has been noted, vision returning slowly.

CASE IV.—C. S., female, age 18. Single. Family history: Father died fifteen years ago of tuberculosis, age 33. Mother died four years ago, at the age of 42, from a shock. Two sisters living and always been well. Has had pneumonia eight times. Suffers from dull headaches and has been obliged to wear glasses. Otherwise always been in good health. In the middle of June, 1915, a rock struck her in the face and broke her glasses, a small piece going in the left eye and being removed. A week later the eye began to smart and burn, vision growing dim. A week later the right eye began to fail in the same way. Condition grew worse, till it was impossible to tell day from night. Examination showed the cornea deeply infiltrated, gray, and hazy. Pupil small and immobile. Patient had to be led about. Clinical diagnosis of interstitial keratitis and iritis was made. Urinary test was positive. Wassermann + + +. Under treatment the condition improved slowly.

CASE VII.—O. C. H., male, age 29. Family history negative. Had a chancre in 1898, followed two months later by a rash all over the body. Was told at that time he had syphilis. Took mercurial and mixed treatment for two years. Spent three months in a sanatorium for tuberculosis which involves the upper portion of the right lung. Three weeks before being seen (September 3, 1915) the right eye began to feel irritated, got red and painful. Photophobia. Examination showed the cornea dull, with infiltrated areas and deep injection. O.D.V. = 0.5 O.S.V. = 1.2 Diagnosis: Interstitial keratitis. Urinary test positive, Wassermann negative. Under treatment the condition improved rapidly.

CASE VIII.—Mrs. P. P., age 52. Married. Family history negative. Always been well. Mother of twenty children, three living, seventeen dying under 1½ years of age. The left eye has been sore and painful for the last two weeks (seen September 20, 1915). Cornea dull, infiltrated pupil, small posterior synechia. Diagnosis of keratitis and iritis. Urinary test positive. Wassermann + + +.

CASE XXIV.—Mrs. J., æt. 37. Family and past history negative. Ten weeks before (seen November 26th, 1915) had been troubled with ulcerations of cervix and labia, which had healed under local treatment. When seen, the face, arms and body were covered with a macular rash. Hair falling out. Mucous patches in throat. Diagnosis: Secondary syphilis. Urinary test positive. Wassermann + + +.

CASE XXV.—D. D., female, æt. 12. Family and past history not obtained, except that she had been operated on for enlarged tonsils and adenoids. Referred from school. Left eye red and deeply injected. Cornea dull and infiltrated. Notched teeth. Skin of hand dry and wrinkled. Rash around mouth. Interstitial keratitis. Urinary test positive. Wassermann + + +.

In the limited number of cases which have come under observation, as is shown by the results obtained in Table I. of 200 cases, the reaction would almost seem a positive diagnosis for syphilis, were it not for the fact that other conditions may give the same reaction. The presence of sugar can easily be ruled out by any of the laboratory tests, and the use of any diuretic can be discontinued for a short period. The best method is to obtain a sample of the early morning urine, and do the reaction before decomposition has set in. A low specific gravity urine (below 1.015) usually gives a positive reaction, and the result of one examination in such a case should not be relied upon. In comparing the results in Table II., the most prominent point in favour of the value of the reaction lies in the fact that in no case in which the history or clinical findings suggested syphilis has there been a negative urine reaction and a positive Wassermann; while in six cases the iodine test was positive and the Wassermann negative. Three cases in which both tests were negative and in which specific infection was not suspected are also tabulated. Three or four cases in which the urinary test was positive and clinical finding suggested specific infection have been under treatment and with marked improvement, though there was no Wassermann obtained. One case, which is not reported in either table, gave a positive urine reaction, also the spirochætes were found from the initial lesion with the dark field illumination.

In conclusion, it seems that in suspicious cases this simple test may aid greatly, either suggesting the use of a better established test or the cautious administration of antisyphilitic treatment.

FASHIONS IN WOUND TREATMENT.*

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THE subject before us is one of the oldest, if not the oldest, surgical problem which has taxed the knowledge of all ages. Wounds by various weapons have always been present with us, and though gunshot wounds are a comparatively modern innovation, the principles of treatment are the same.

If we go back to earlier civilisations we find that much more was known than we sometimes imagine. In the Grecian era a great principle was enunciated by Hippocrates, who enjoined that all contused wounds should be brought to suppuration. The dressings applied to wounds during the Roman times were very simple. Celsus states: "The first application to every wound should be a piece of sponge expressed out of vinegar. If the patient be unable to sustain the strength of the vinegar, wine must be employed. A slight wound is assisted even by the application of a sponge dipped in cold water. But in whatever mode it is applied it will be beneficial while it remains moist. Therefore it must not be allowed to become dry. A wound may be healed without exotic, rare or compound bodies." Later he states: "If the inflammation be severe, and there is no hope of union, we must have recourse to suppuratives. At this juncture the use of warm water also will be necessary, that it may dissipate the matter, soften the hardness, and accelerate the pus. When the inflammation shall have ceased the wound should be cleansed, and linen dipped in honey will answer this purpose best."

* A paper read before the St. Mary's Hospital Medical Society.

Galen had no very original ideas as to wounds, but he summarises his views as follows: "Our aim indeed is, in the first place, to bring the divided parts together; secondly, to fix sutures; thirdly, to take care lest any substance should intervene between the lips of the wound; fourthly, to protect the parts. As time proceeds we shall have another aim: to let out the matter which is done by opening the wound, etc. . . . We preserve the health of the part by drying substances."

The aim, then, of these old masters was to cause the wound to suppurate, and to give free drainage to the matter which formed. For centuries these principles were followed with modifications which the ingenuity of successive generations of surgeons thought fit to make. We gain an insight into the surgical practice of the learned Arabs in the Middle Ages by studying Albukasis. In the 84th chapter of his treatise he recommends that on the advent of inflammation a cotton dressing steeped in oil of roses, either alone or combined with astringent wine, should be applied to the part. In another place he states, with reference to a wound which bleeds too much: "If the wound is slight, and without complication, the treatment will be easy. It will suffice to spread over it a powder which will cicatrise the wound before contact with air alters it. This powder is composed as follows:—

"'Take incense and dragon's blood, two parts; Lime either simple or slacked, three parts; mix them together and pass through a filter; fill the wound with it.'

"One may employ lime alone if the other ingredients are not at hand."

One of the first men to strike out a new line in the treatment of wounds was Ambrose Paré, and it is interesting even now to read the story of the way in which his discovery was made. In the 11th Book of his works he states:—

"Now I had read in John de Vigo that wounds made by gun-shot were venenate or poisoned, and that by reason of the gunpowder. Wherefor for their cure it was expedient to burn or cauterise them with oil of elders, scalding hot, with a little treacle mixed therewith. But for that I gave no great credit neither to the author nor remedy, because I knew that caustics could not be poured into wounds without excessive pain, I, before I would run the hazard, determined to see whether the chirurgeons who went with me in the army used any other manner of dressing to these wounds. I observed and saw that all of them used that method of dressing which Vigo prescribes. . . . It chanced on a time that, by reason of the multitude that were hurt, I wanted this oil. Now because there were some few left to be dressed I was forced, that I might seem to want nothing and that I might not leave them undressed, to apply a digestive made of the yolk of an egg, oil of roses, and turpentine. I could not sleep all that night for I was troubled in mind, and the dressings the precedent day, which I judged unfit, troubled my thoughts, and I feared that the next day I should find them dead, or at the point of death, by the poison of the wounds, whom I had not dressed with the scalding oil. Therefore I rose early in the morning. I visited my patients, and beyond expectation I found such as I had dressed with the digestive only free from vehemency of pain, to have had good rest, and that their wounds were not inflamed or tumefied. But, on the contrary, the others that were burnt with the scalding oil were feverish, tormented with much pain, and the parts about their wounds were swollen."

This observation of Paré led him to modify his treatment, and in another place he lays down rules for the dressing of different wounds. When he suspected putrefaction he recommended substitutes which resisted putrefaction as contained in a remedy which he terms Egyptiacum, which was compounded of alum, verdigris, copper sulphate, rose water, and honey. These ingredients were dissolved in vinegar or brandy, and were inserted into the wound on pledgets or tents. When, however, no putrefaction was anticipated Paré used the extraordinary oil of whelps. This oil, which was widely used in the 16th and 17th centuries, was made by boiling two young puppies with earth worms, and adding oil of lilies, turpentine, and an ounce of aqua vitæ or brandy. One can imagine that the turpentine and spirit must have been the active ingredients. In Paré's book is mentioned another application which he himself had not tried, which was commended by Lorenzius Jaubertes, combining calcined mercury, camphor, oil of lilies, and spirit, which is interesting because it is the first record I have been able to find of an application containing a mercurial salt, which must have had antiseptic properties.

A century after Paré, Wiseman, that famous surgeon who lived at the time of the Civil War in England, was still recommending Paré's oil of whelps as a dressing for wounds. During the 18th century opinions as to wound treatment altered, and the summarised experience of a man who lived at the time of the Napoleonic wars is of interest. Guthrie, who had had exceedingly great experience of gun-shot wounds, wrote as follows:

"Nothing should be applied but a piece of linen or lint, wetted with cold water. This may be retained by a strip of sticking plaster or any other thing applicable for the purpose of keeping the injured part covered. A compress of linen or other similar substance, moistened with cold or iced water, when procurable, will be useful, and a few inches of linen bandage may be sewn on."

When a wound becomes tender a little oil, lard, or simple ointment may be placed over it. Cold or iced water may be used as long as cold is grateful to the sufferer. When it ceases to be so, it should be exchanged for warm."

Guthrie stated that fresh air and cold water were essentials and asserted that simple flesh wounds were cured generally in four weeks, and at any rate, the majority were healed in six weeks.

Coming a little later to the middle of the 19th century, an interesting discussion took place in 1848 at the Académie Nationale de Médecine, Paris. In this discussion such famous men as Roux, Malgaigne, Amussat, Velpeau, Huguier, took part. Less was said about the dressings than about the question of opening up the wounds and amputation. But I will quote the views of a few of these men.

Huguier, who stated that all the wounds treated by him healed well, recommended different treatment in February from that in June. In the winter simple dressings, lint, and ointment. When inflammation was manifested the same means were adopted unless the reaction was marked, in which case frequent fomentations were applied or poultices. In June more frequent use of cool fomentations and of irrigation was advised.

Amussat strongly recommended irrigations with tepid water and condemned poultices and ointments.

Piorry favoured simple lotions, gentle pressure twice a day to get rid of pus and *débris*, and bandages of diachylon.

Bégin, after condemning other methods of dressing, states: "The common method is that which reason and experience combine to advise.

Water at the ordinary temperature is the best possible local application."

An insight into the method of dressing wounds immediately prior to the introduction of antiseptics is obtained by glancing into "The Medical and Surgical History of the Great American Rebellion." In Vol. III., p. 867 of that ponderous work occurs the following:—

"The primary dressing of wounds and operations was always of the simplest character. A piece of lint or linen, held in place by the turns of a roll of bandage, is kept well moistened with water. The presence of maggots in wounds in the field and camp hospitals was frequently an annoying complication. Oil of turpentine and infusions of tobacco were used to kill these pests. Petroleum and kerosine oil was tried in some cases with markedly good effect, but the most effective remedy was a thorough examination of the dressing every two or three hours."

A few years after the American Civil War came the discovery of antiseptics, and the first great war in which these were used was the Franco-Prussian War of 1870-71. But even in that war the use of antiseptics was by no means universal. In the monumental work which German surgeons compiled at the close of that war it is pointed out that the antiseptic treatment of wounds according to Lister's method had not yet been completely adopted. Indeed, the statement is made that the treatment of the surgeons in the war of 1870-71 did not differ in essentials from that in the previous war of 1866. At the same time, a perusal of the methods of treatment makes it clear that Lister's influence was already being felt in a marked manner. The summary of methods of treatment is as follows:—

The wounds were dressed with dry or wet lint. For moistening one used cold or warm water simply, oil or carbolic oil, usually 1 in 10 or 1 in 15, camomile tea, camphorated wine, watery solution of carbolic in different percentages, permanganate of potash, bleaching powder, sulphate of zinc, sulpho-carbolate of zinc (seldom), and silver nitrate; or the lint was smeared with balsam of Peru.

Dressings of cod liver oil were favoured by the 11th Army Corps, and the healing of wounds so dressed proceeded quickly and often more speedily than by other methods. Arnica was also tried successfully. The writer sums up: "The use of carbolic was frequent at the beginning of the war and later became almost general. The dosing was uncertain, and the antiseptic-dressing method was, with few exceptions, still unknown. Judgment over the worth of carbolic varied, but the majority of the doctors were satisfied with its working.

Since the Franco-Prussian war, the antiseptic treatment of wounds has been developed. But in many cases proper opportunity for carrying it out has been wanting.

I have been dealing hitherto with the applications which are made to wounds. There are certain other points in treatment which are not so debatable. It has been generally agreed during the ages that gross foreign bodies are better removed, that hæmorrhage should be arrested, that the parts affected should be kept at rest, and that sufficient drainage for the exit of discharges should always be provided. At the same time, constitutional treatment has always been advised.

Before we discuss the methods which are in use at present for gun-shot wounds, we should get a clear idea of the condition of the tissues injured by a gun-shot. The wound is always contused; there is always superficial necrosis along the track of the missile, and bacteria are always implanted in the tissues. It follows from this that in every wound which is to heal there must be a vital reaction of an inflammatory nature, and it must be remembered that the inflammatory process is characterised by two main features: the pouring out of fluid lymph and the emigration of leucocytes. The leucocytes are as necessary in the fight against bacteria and in helping to clear off sloughs, as is the serum, and no method of treatment which does not take them into account is adequate.

We must also remind ourselves that the vast majority of wounds get well under, or in spite of, any treatment, and that it is very difficult for any one man to form a true judgment of the relative methods to be discussed. Only by watching vast numbers of wounds of similar character, treated by different methods at the same time, can a fair judgment be formed. Since this is only possible to few, we shall probably be forced to decide by the weight of opinion of many different observers.

Now at the present day there are two methods of local treatment which are strongly advocated by different groups of workers. One aims at developing the natural body resources against bacterial infection; the other tries to destroy bacteria after they are implanted in the wound by external applications. The first is sometimes called the physiological, the second the antiseptic method of treatment. The antiseptic method is recommended by most surgeons. The so-called physiological method has been exploited by eminent bacteriologists, and, as you know, the main feature of this method has caused it to become known as the hypertonic saline method. The utility of true physiological methods of rest and drainage is not disputed.

I will deal first with the salt treatment. It consists in applying a 5 per cent. salt solution, sometimes combined with ½ per cent. sodium citrate, to the surface of the wound, and thereby inducing a flow of serum which will wash out any microbes and destroy them. Stress is laid by the originator of the method on the maintenance of an outward flow of serum, this flow being maintained by what has been termed the "drawing power" of the salt. It is admitted that if the flow for any reason ceases the wound is placed in a favourable condition for the entry of micro-organisms into the tissues. Now I do not intend here to go into the physical problems which are at issue. But one may say that it would require more than one series of investigations from more than one laboratory to substantiate some of the sweeping conclusions drawn by the originator. Even the truth of the assertion that an increased flow of serum takes place after application of strong salt-solution is doubted by some observers, and I am not aware that any convincing experiments have yet been put forward to prove the assertion. The clinical estimation of amount of lymph discharged from a wound is difficult, and its comparison with the corresponding amount of pus which normally comes away from a wound treated by other means than hypertonic saline has never been carried out. On this point we must refer to a paper recently read before the Pathological Section of the Royal Society of Medicine by Dr. Parry Morgan, who shows that the experiments adduced to prove the drawing power of salt are open to a much simpler interpretation which excludes physical laws other than gravity and diffusion.

But even assuming that by means of the salt treatment an increased flow of lymph takes place that is but one factor in the fight against bacteria; an even more important factor is the action of the leucocytes which are kept back by the action of strong salt solution. Antiseptics, as they are

commonly used, interfere much less with the emigration of the leucocytes. The beef-steak appearance of a salt-treated wound is due to the almost entire absence of leucocytes. The opinion that in a wound infected with bacteria the presence of properly draining pus is something of which the surgeon should be ashamed is based on a misconception, as Parry Morgan has shown. Until the invading infection has been overcome the presence of pus is laudable as indicating a more complete local resistance against infection than the mere effusion of lymph. This fact, indeed, was recognised after a time by Sir Almroth Wright, who thereupon suggested that after a few days the strong salt solution should be replaced by normal saline.

Last year I gave this method a trial in several of my wards at the Third London General Hospital, and in the majority of cases it cleaned up the wounds well. In fact, for a time I thought it better than other methods, simply because the wounds looked cleaner and were free from pus. But on one occasion I had a reminder that bacteria were present, although the appearance of the wound was clean, by certain toxic symptoms, accompanied by fever and rigor, owing to the stoppage of the normal discharge, in a quite superficial wound, and it was brought home to me by this, and more especially by my knowledge of the research work of Dr. Parry Morgan, that these clean-looking wounds were not always as they seemed. I therefore gradually gave up the use of salt and adopted a neutral solution of hypochlorite, with the addition of a little citrate of soda. My purpose in adding the latter was to prevent any lymph clotting and stopping the normal discharge.

I will now give a few reasons which appear to militate against the salt treatment as constantly practised. Mr. Fleming has shown that the most frequent microbes of infection in gunshot wounds are bacillus aerogenes capsulatus,, streptococci, staphylococci, coliform bacillus, and bacillus tetani in that order of frequency, and that as the wound progresses it is the streptococcus more than any other which maintains its hold. Every surgeon of experience will confirm the statement that the streptococci are the most dangerous microbes to be met with in wounds after the first day or two.

Now Sir Almroth Wright has shown that streptococci are able to grow in blood serum. He calls them serophytes, and Colonel H. M. W. Gray, in his recently-published paper, also states that streptococci thrive in serum. Yet the only defence that the salt treatment gives against streptococci is serum. That the originator of the method recognises this has already been noted. Thus he says: "But whether we have before us the complete or only the incomplete result, we have a wonderful improvement upon the state of the wound before treatment. None the less, the prospect for the future is not quite reassuring; in point of fact, we have here lying open and naked before us all the lymph spaces, and, moreover, elements of the lymph are disposed in the kakotropic arrangement, the fluid . . . in front and the leucocytes which will be capable of combating the streptococci behind. And, at any rate, so far as the superficial lymph spaces are concerned, there would now seem to be nothing to prevent microbial infection, save only that we have here an outflowing current."

Later he says: "The tide might easily turn and flow inward."

And again: "Let us merely put it down upon our tablets that it would seem to follow that we have in strong salt solution an agent which would be capable of arresting all suppurative processes."

Therefore Sir Almroth Wright suggests that normal saline shall be substituted for strong saline at a certain stage of the treatment. He observed that a film of pus appeared when normal saline was substituted, and argues that the normal saline has drawn the leucocytes out. But it is quite open for one to argue that a satisfactory pathological condition requires the presence of leucocytes, and that it is merely the taking away of the noxious strong salt which permits the leucocytes to advance. And we would do well to remind ourselves that bacteria can grow in normal saline, so that any stray remaining microbes might flourish.

The most damaging criticism that I have yet seen of the strong salt treatment comes from one of its most strenuous advocates—Colonel Gray. He describes the treatment by packing the wound with gauze into which salt tablets are placed, and designates such a dressing a "perfect dressing." We should now expect a free flow of lymph to occur. But, to our astonishment, it is stated: "Ordinarily, however, this tablet and gauze pack can be left in for many days, in test cases it has been left even for fourteen days. After the first twenty-four hours or so it often keeps wonderfully dry. Apparently this happens when the necessity for lymph lavage has passed. But no satisfactory explanation of this phenomenon has yet been recorded."

Here we have an open confession that frequently there is no continuous lymph flow, and incidentally an attribution to the salt of the power of choosing when it should stop the lymph flow. Now, as stated above, the stoppage of lymph flow in the presence of salt creates a most dangerous position of affairs, and the two authorities quoted seem to prove that the method they advocate puts the wound from the first to the fourth (or other day on which normal saline is substituted) in a defenceless condition against streptococci. To many it is not surprising that the dressing remains dry, nor that Colonel Gray has to put down a list of indications for changing the dressing, which include: Retention of pus, extension of inflammation, deterioration of the patient's general condition, and when the deep dressing becomes so offensive that it is annoying to the patient.

To sum up, a solution of 5 per cent. salt stops an essential part of the process of inflammation, and the much-lauded lymph flow is really pus without the leucocytes.

We must now consider antiseptics and their use for treatment of wounds. On the one hand surgeons of vast experience of surgery, both before and after the introduction of antiseptics, state, in no hesitating terms, that the treatment of septic wounds has been revolutionised by their use. On the other hand, bacteriologists and some surgeons maintain that they have not come across any satisfactory clinical or bacteriological evidence of the utility of antiseptics as employed in infected wounds.

Views so diametrically opposed as these call for thought. If the surgeons of experience are right, the laboratory experiments must have a fallacy somewhere in them. If the bacteriologist's observations are accurate, what shall we say as to the observing power of the many brilliant and distinguished surgeons who support the use of antiseptics for wounds. Let us go back again to the introduction of antiseptics, which was done by Lister in 1867. The first war in which the antiseptics were used even partially was the Franco-Prussian, and although, owing to the imperfect way in which antiseptics were then used, the Germans themselves preferred to class this war with the preantiseptic days, yet from what I have said

earlier, you will remember that carbolic and other substances of an antiseptic nature were used quite widely.

Comparing the mortality of wounds of the limbs in the war of 1864 with those of the war of 1870-1871, one is interested to find that the mortality in the case of the upper limb fell from 8 per cent. to 5 per cent. and in the lower limb fell from 12 per cent. to 10 per cent.

In the Russo-Turkish war of 1876-7 all the surgeons in the Russian Army spoke favourably of the modified antiseptic treatment then carried out. It was remarked that the antiseptic treatment did more than had ever been effected with any other. For, as Erichsen said, "It was by its means that Bergman and Reyher saved almost all their cases of gun-shot wounds of the knee-joint. The fate of the soldier is truly, as Nussbaum has said, in the hands of the surgeon who firsts attends him. If primary antiseptic treatment is at once used, he will have an infinitely better chance than by any other method."

In some of the succeeding wars, as well as in the present, it has been found difficult to carry out the antiseptic treatment thoroughly. But its value in keeping wounds clean has never been questioned. There are two methods of antiseptic treatment:—

1. To sterilise the wound completely before the microbes have had a chance to get a hold.

2. To diminish the surface infection and keep the wound clean after the bacteria have gained a hold.

The first method is only practicable within the first few hours after receipt of an injury.

The second method can be applied at any subsequent stage.

It is rather doubtful whether the complete sterilisation of the wound at the onset is often practicable, but I think there can be no doubt in the mind of anyone who has had experience of wounds, that antiseptics will keep them in a comparatively healthy condition.

Here we must refer to the interesting researches of Parry Morgan on the action of antiseptics in the presence of pus. By a series of ingenious experiments he has shown that some antiseptics—*e.g.*, carbolic acid, are efficient even if there is a large proportion of pus present, though considerable time may be needed for their action; other antiseptics, for example hypochlorite solutions, act rapidly and efficiently when only a small proportion of pus is present. He states "it becomes plain that in appraising the value of an antiseptic the purpose for which it is used must be taken into account. For instance, for washing out a wound, when the antiseptic would be in great excess, hypochlorous solutions are very potent and carbolic acid comparatively weak. On the other hand, for an application in a dressing, when the pus would tend to be in excess, hypochlorous solutions would be practically useless, whilst carbolic acid, although it has the disadvantage of interfering with the activity of the leucocytes, is fairly efficient."

What are the objections brought against antiseptics?

1. That they do harm to the tissues.

2. That they do not penetrate far enough into the tissues.

3. That they are quickly neutralised by albuminous substances.

As to the first objection, in a gun-shot wound there is always superficial necrosis of tissue along the bullet track, and the addition of an antiseptic can do little extra harm, and will do much good by killing the organisms which would be present in greater numbers in this tissue.

As regards penetration, it may well be that some organisms get deeply into the tissues, but the vast majority do not, and provided free drainage is made, and there is no damming up of discharges, the tissues should be able to look after themselves. It is rather curious that most writers on the subject omit any reference to the anti-bacterial action of the connective tissue cells.

In respect of the neutralisation of antiseptics by albuminous substances, if the wound is kept clean there will be little pus left to neutralise any antiseptic which is inserted, and still further we possibly have now at our disposal an antiseptic which combines with albuminous substances without much loss of its antiseptic property. I refer to the hypochlorites, especially the neutral form, which has been introduced by Dakin. Indeed, Dakin's solution seems to promise to be of the greatest value in many ways. It has been pretty well proved that in the strength used it does not damage the tissues, does not prevent the leucocytes from appearing, and forms an actively antiseptic substance.

If we were to believe all that its advocates say, we have found a perfect antiseptic. But one must be sceptical till further work has been done. At the same time in those cases in which I have tried hypochlorite treatment, especially when mixed with ½ per cent. sodium citrate, I have been exceedingly pleased with the wonderful way in which wounds clean up.

I will summarise what I think is the best treatment for wounds very briefly.

1. Antiseptic dressing immediately.
2. Anti-tetanic serum.
3. Prophylactic dose of mixed vaccine and possibly an antiseptic vaccine at a later stage of treatment.
4. Rest to the part.
5. As soon as possible thorough drainage after removal of coarse foreign bodies.
6. Treatment by local applications of suitable antiseptics.

I cannot here go into the question of the method of application of antiseptics, but I should just like to give my opinion that continuous irrigation should not be continued too long in that it washes away the coagulable lymph, which in many cases is necessary for the repair of a wound.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

MEDICAL LAW REFORM.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In my last letter I attempted to describe as briefly as might be the breakdown of the protective clauses of the Medical Act of 1858. The breakdown was gradual, but it was made evident within a few years by rulings in the High and Supreme Courts that the penal sections of the law were virtually reduced to dead letters. No sufficient attempt was made during all this period to bring the facts and the evils that arose from them before the Government. The British Medical Association drew up one or two Bills amending the Act. Whether these Bills were received or not I am not clear, but if they reached the hands of the Cabinet no result followed, nor have they ever been heard

of since. The Association had easy means of ascertaining that Bills of such kind could have no hope of a Reading in the House unless taken up by Government, and they had also easy means of informing themselves that no Cabinet would consider such a task unless it were forced upon them by demonstration of its urgent necessity. Reference to the indexes of the *Journal* would show that I frequently urged this upon the Association, and if I, a mere outsider without influence, could speak dogmatically on the question, it seems evident that the Association could more easily have got the same information. The subject was never fully discussed at the great annual meetings, and no attempt was made to address a resolution to the Government in the names of the distinguished representatives of every branch of the profession always present on these occasions. No demand was made for a Governmental enquiry, although it was evident (as I constantly urged) that this was a preliminary necessity.

The appointment of the Select Committee on Patent Medicines was brought about by the independent action of Members of Parliament and was urged by no professional organisation. An enormous service had, however, been rendered by the British Medical Association in preparing for such an enquiry. It had published periodically over a long period articles on Secret Remedies. These furnished the analyses of a great number of quack medicines and cited the pretensions of the advertisements. These articles were subsequently published in book form. They provided an unanswerable indictment of the trade in secret nostrums, but no attempt was made to bring these to the notice of statesmen and legislators who might have taken action upon them. When at last, after pressure by members during several Sessions, the Government undertook to set up an enquiry, no attempt was made by the British Medical Association to enlarge the very narrow limitations which had been put round the investigation. The question of practice of unqualified pretenders under the cover of the traffic in nostrums and apparatus was entirely left out, and the main question of practice under false pretences by uneducated quacks was also omitted. It seems unquestionable that the enquiry might have been made once and for all complete if the matter had been pressed authoritatively upon Government. The Select Committee had been brought into only the lightest touch with these latter problems. They were not called upon in any way to refer to them, and yet in a passage which I have previously cited from the Report, they speak of "swindles like Dr. ——, the 'eye quacks,' the 'deaf quacks,' the cancer curers, the consumption curers, the electric-belt makers, the curers of rupture without operations, and 'fakirs' generally." When Parliament resumes its normal functions the report of the Select Committee must be pressed forward. It will give the greatest support to the demand for an enquiry into the question of practice by unqualified persons. It will be possible to prove the case for legislation by examination merely of a few illicit practitioners. It is, however, probable that the threat of summons before a Tribunal would cause the flight of a great many of these gentlemen, especially those hailing from Germany and America. The whole class would easily be shown to be composed of ignorant men devoid of medical knowledge. The enquiry would also drag forward the considerable number of qualified men, struck off the Register for infamous conduct, who now serve these fraudulent masters. The citation from the report which I have made was in reference to the amount spent in newspaper advertisements of patent medicines, and the Committee stated that this amount did not include the sum expended annually by the classes of quacks which they enumerated. The total sum divided among those papers and periodicals which accept quack advertisements cannot be, if at all, much less than £3,000,000 a year. Most of the papers are fully aware of the nefarious character of the trades whose profits they are sharing. In my first letter of this series I stated that the conduct of the bulk of the Press (there are, of course, many exceptions) in this connection had all along been scandalous, and had become more than scandalous since the publication of the Select Committee's report. I must, however, reserve the discussion of quackery and the ethics of journalism to another and final communication.

I am, Sir, yours truly,
The Old Rosery, Earlswood. HENRY SEWILL.
June 15th, 1916.

RE B.M.A. AND TRADE UNIONISM.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—That portion of the medical profession, if I may venture still to call it such, is deeply indebted to you for the clear and incisive way in which you deal with those members of the B.M.A. who are taking up a hostile attitude to such of their *confrères* who do not see eye to eye with them. The other day I was sitting in a public tram when I came across one of these gentlemen, who attacked me and told me that I was *a blackleg*, and ought to be ashamed of myself for having left the B.M.A. He went further, and accused me of having left it because I was passed over as president of the local branch. He said that every man ought to belong to the trade union of his *trade*. He then went on to say that I had left on account of the subscription being raised. I told him that I had belonged to it for twenty-five years and that I had left it because it had, I thought, stultified itself and the profession by the way it had behaved, and I thought that it had mismanaged and misspent the money which it had in trust; that I had never sought any honours, and it was not my nature to seek such. I might have pointed out that a man who seldom took the trouble to attend the meetings certainly cannot be accused of expecting any honours, or seeking them. I was not surprised at being addressed as a blackleg, and must admit that I regarded it as a compliment under the circumstances, but I think I had reason to take exception to the time and place chosen to use such an opprobrium and to attribute such mean causes for the step taken.

I personally think that a studied system of blackmailing and intimidation on the part of an organised oligarchy, who utilise honourable positions to benefit themselves chiefly, is fast approaching, and that it is time that steps should be taken to enable those who do not wish to form themselves into a *trade* to protect their interests. This can easily be done, as in many cases the gentlemen who aspire to, and attain, the posts of honour in this society are generally, in provincial towns, men who are attached to the local hospitals, and who think that it is to their interest to keep in with all men if possible, and who thereby throw an undue weight and professional status on a portion of the profession who are showing themselves unworthy of their trust. By a system of organisation amongst those who do not approve of the methods adopted by the B.M.A. and their ilk, it would be easy to combat and put an end to their nefarious methods.

I am, yours truly,
A BLACKLEG.

Bournemouth, June 15th, 1916.

THE CIVIL RIGHTS OF MEDICAL PRACTITIONERS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—You remember that the English College of Surgeons fought valiantly for the civil rights of one of their members who was despitefully used by the governor of one of the Colonies. I submit that at the present moment a duty lies—firstly, on Irish Colleges and Universities, and, secondly, on the Medical Associations—to see that any medical men or women imprisoned or detained as a result of the recent rebellion shall have all reasonably proper treatment.

We in Ireland have contributed so great a proportion of our members to the R.A.M.C. that we can afford to claim special consideration for those of our brethren who have given service to the rebel side.

Furthermore, it is a matter of the gravest moment that the "Red Cross members" of any belligerent body should always be given those privileges to which the Geneva Convention entitles them.

I am, Sir, yours truly,

Dublin, June 13th. CAPTAIN, R.A.M.C.

TRANSACTIONS OF SOCIETIES.

THE ROYAL SOCIETY OF MEDICINE.

SECTION OF OBSTETRICS AND GYNÆCOLOGY.

MEETING HELD THURSDAY, JUNE 8TH, 1916.

Dr. M. HANDFIELD-JONES in the Chair.

JOHN D. MALCOLM, F.R.C.S.Ed., showed a

CASE OF STRANGULATION OF THE UTERUS BY TORSION OF THE BODY ON THE CERVIX—SUPRA-CERVICAL HYSTERECTOMY—RECOVERY.

ROTATION of the whole uterus with an ovarian or uterine tumour is not very common, the displacement being at most something over half a revolution. I have never seen complete arrest of the blood supply from this cause, and I have not before seen or heard of a case like the following.

On November 3rd, 1915, a rather frail lady, æt. 70, married, but never pregnant, complained after dinner of pelvic pain. Next morning she was better and took her breakfast in bed as usual. She could not get up afterwards because the pain became so intense, and it was then accompanied by vomiting. Towards evening the temperature rose to 101° F. I saw her late that night with Dr. Hewetson and Dr. Watson, of Reigate, and found a hard, round pelvic tumour, median in position, and about four inches in diameter. Behind this and also in the middle line lay an elongated irregularly-oval mass measuring apparently about 3½ inches from above downwards by 1½ inches from side to side. This was fairly soft but of uneven consistence. It seemed to be attached to the hard mass in front, and there was a soft short cervix uteri below. The rectum was firmly compressed, but the abnormal parts seemed to be slightly movable as one mass in the pelvis. They were very tender and therefore seemed larger and more fixed than they really were. It was known that a fibromyoma existed before the patient's menstruation ceased, and it was easy to surmise that something had twisted, but the condition behind the hard tumour puzzled us all.

On opening the abdomen a fibromyoma was seen attached to the left anterior upper part of the uterus. This and the uterine body had revolved one full turn on the cervix, the lower end of the body being so tightly twisted that the parts above were of a deep blue-black colour, and although it was only 16 hours after the pain became severe and about 28 from its first onset, the conditions caused a distinctly offensive odour.

Supracervical hysterectomy was performed, the left ovary and fallopian tube, which were raised by the new growth above the constriction, were taken away. The right ovary and the greater part of its tube were below the constriction and were not removed. Considerable trouble from flatulent distension followed the operation, but otherwise recovery was good although slow.

The specimen which is exhibited shows that the uterine body was as big as that of a woman in the prime of life, but it is obviously enlarged by congestion. The softness of its tissue, due to senility, evidently facilitated the attenuation necessary to make this viscus sufficiently narrow to become strangulated by torsion.

Dr. CUTHBERT LOCKYER welcomed the publication of Mr. Malcolm's case of acute torsion of the uterine body, because it demonstrated a rare condition, and one which presented extreme difficulties in diagnosis. With reference to torsion of the corpus uteri generally considered, it was known that a twist of the body on the cervix through as much as 90 deg. could occur without producing any symptoms suggesting its presence. In no one of eight cases recorded by Kelly and Cullen had the torsion given rise to any special symptoms, and in one of these the uterine body, which was abundantly fed by omental blood-veins, was rotated through 180 deg. The torsion usually occurs through the isthmus, which gradually undergoes atrophy and forms a sort of pedicle for the body above. This pedicle may ultimately be severed completely from the cervix below, as was shown in the case of Bastinelli of Rome. An account of this case is published in Kelly and Cullen's work on "Myomata." The patient was aged 53. A fibroid had been known to exist for twenty years, and there had been several attacks of severe peritonitis. At the operation it was found that the myomatous uterus was completely severed from the cervix owing to atrophy of a torsioned isthmus. The uterus was not acutely strangulated as in Mr. Malcolm's case. On the contrary, it was adherent to the anterior abdominal wall, from whence no doubt it derived nutrition. The appendages were rolled up to form a single pedicle attached to the floor of the right iliac fossa. The pelvis was as empty as if a supravaginal hysterectomy had been performed. Clinically, therefore, cases of *gradual* torsion are sharply differentiated from those of *acute* torsion.

Mr. Malcolm's case well illustrated the latter condition, and, as supplementing the remarks of the exhibitor, Dr. Lockyer referred to the following cases of acute torsion :—

(1) Poth's case shown in Berlin, May, 1913. The patient was aged 56. She had suffered from severe abdominal pain for 21 years, and was known to have a large abdominal tumour. The abdomen contained blood-stained fluid. A pedunculated subserous myoma with a twisted pedicle was removed, and then the uterus itself was found to be twisted upon its neck through 360 deg. from left to right.

(2) In August, 1914, Drs. Eden and Lockyer operated on a case in which a similar condition was discovered. The large myomatous uterus was blue-black in colour, and both appendages were engorged with blood and thrombotic.

(3) Steinbuchel's case, in which severe internal hæmorrhage resulted from rupture of one of the vessels which was severed during torsion of the pedicle.

(4) Grunert's case, where a moderate degree of torsion of the uterine body (90 deg.) led to very acute symptoms simulating the acute torsion of an ovarian cyst.

(5) Jolly's case, in which a torsioned myomatous uterus became impacted in the pelvis and led to displacement and blocking of the ureters, double surgical kidney, and death from uræmia.

The causation of torsion of the uterine body is a subject for speculation. When, as in Poth's case, the pedicle of a large myomatous uterus becomes twisted it is not difficult to understand that a small uterine body lying below may share in the process, especially since it is acknowledged that once torsion has taken place it is apt to be progressive. In a case like Mr. Malcolm's, where the tumour has a wide attachment to the uterus, it must be assumed that in trying to rise out of the pelvis it meets with resistance, to overcome which rotation of the tumour and of the uterine body is brought into play. The fact that these cases occur in women over 50 years of age is noteworthy.

Mr. MALCOLM replied.

Dr. F. J. MCCANN showed a specimen of pregnancy in a large fibromyomatous uterus.

The PRESIDENT, Dr. HERBERT WILLIAMSON and Dr. CUTHBERT LOCKYER discussed the specimen.

Dr. F. J. MCCANN showed a specimen of "soft fibroma of the vaginal wall."

Dr. ANDREWS said that he had had a somewhat similar case, which he had described at a meeting of the Society several years previously. The patient complained of a bulging of the anterior vaginal wall which had been mistaken for a cystocele, and the operation of cystopexy had been performed by a general surgeon. There was a large semi-fluctuating mass presenting at the vulva. Dr. Andrews made a longitudinal incision through the vaginal mucous membrane, and enucleated a soft œdematous fibroid about the size of a man's fist.

Dr. HUBERT ROBERTS said: "I have also met with a case very similar to that described by Dr. McCann but (as in Dr. Russell Andrews' case) mine occurred in the *anterior* vaginal wall. It was really a fibro-cellular tumour of the utero-vaginal cellular space and not a vaginal fibroid. The patient was aged 47, single, and was admitted to the hostel of St. Luke, Fitzroy Square, W., on November 12th, 1912, under the care of Sir Francis Champneys, who removed the tumour. I was then the visiting medical officer. The patient's chief complaint was trouble with micturition for the previous 12 months, with occasional attacks of retention of urine. On examination a smooth mass was found bulging the anterior vaginal wall as high as the fornix, convex in shape, and almost occluding the passage mechanically. The cervix could just be felt far up behind this mass. Bimanually a 'cake-like' mass, measuring 4 in. by 4 in. and 2 in. vertically, could be grasped. It was firm but not elastic. A bladder sound passed 6 in. in front of the mass. It was removed under anæsthesia by incising the anterior vaginal wall, and was found to be quite free of the urethra, and to occupy the cellular space between the bladder and cervix. It was fairly easily enucleated from its cellular bed, and had the appearance of a soft fibroid. It weighed 7 ounces. The cavity was plugged with gauze as bleeding was fairly free. The patient did well, and has never had any recurrence to date. Sections of the tumour showed it to consist mostly of fibrous tissue and not muscle (Van Gieson stain). Very few cellular elements were found. It appeared to be an innocent growth and not a sarcoma."

Dr. MCCANN replied.

Dr. H. RUSSELL ANDREWS read a short communication on three cases of

HÆMATOMA OF THE ABDOMINAL WALL.

(1) A patient 8 months pregnant was admitted to the London Hospital, very ill, with pulse rate 135 per minute, temperature 101° at night, respirations 28—36 per minute, with severe cough and much dyspnœa. The pregnant uterus was felt in the left half of the abdomen, while the right half was filled by a large, exquisitely tender, tumour. A premature still-born child was born 30 hours after admission. The patient's general condition was such as to contra-indicate abdominal section until several days after her admission. A diagnosis of ovarian cyst, with localised peritonitis, was made. At the operation the tumour was found to be a hæmatoma, containing nearly 2 lbs. of blood between the right transversalis muscle and the transversalis fascia.

(2) A patient was sent into the London Hospital with a diagnosis of twisted ovarian tumour. For two weeks she had had a painful swelling in the left side of the abdomen, after carrying a pair of steps upstairs. Dr. Andrews made a diagnosis of hæmorrhage into, or round, a desmoid tumour in the left rectus. The tumour proved to be a hæmatoma in the left rectus muscle (spreading out a short distance between the transversalis muscle and the transversalis fascia.

(3) A patient under the care of the late Dr. Maxwell had a painful swelling on the left side of the abdomen, which had appeared a week previously with coughing. This swelling was found to be a hæmatoma, which had apparently originated between the left rectus and tracked outwards. Dr. Andrews referred to four previously recorded cases of hæmatoma of the abdominal wall. Four of the seven patients were pregnant, and four complained of cough.

The PRESIDENT thought that these cases must be very rare, as he had seen only one instance during a somewhat long experience. The patient, a primipara, was admitted to the medical ward of St. Mary's Hospital suffering from an attack of typhoid fever. The pregnancy was advanced to the middle of the seventh month. About the third week of the fever labour pains came on, and a dead fœtus was expelled. During the third stage pain was complained of in the region of the right rectus muscle about the level of the navel. It was noticed that a lump had formed here about the size of an egg, and this slowly increased, until next day it formed a tumour equal in size to a small cocoanut. The skin over the mass was of a bluish colour, and the tumour itself felt semi-solid in character. By degrees the lump slowly grew less, and at the end of six weeks had practically disappeared. As no operative interference was called for, the nature of this swelling could not be ascertained with certainty, but from its mode of onset, and from its gradual absorption, there could be little doubt that it was formed by an extravasation of blood into the tissues round the rectus muscle.

Dr. J. D. MALCOLM said: "I have seen only one case of this kind. It occured in a woman past the menopause. An abnormal swelling was found after strain. It was situated over the gall-bladder region, and was confidently diagnosed as something inside the peritoneal cavity. The operation showed a small cavity in the abdominal wall containing old thickened blood, and the peritoneal sac was not opened. Recovery was satisfactory after temporary drainage.

Dr. AMAND ROUTH had seen one case of hæmatoma of the abdominal wall in a woman who had for some time had a small umbilical hernia, the ring

of which suddenly gave way during a sudden effort, and hæmorrhage took place below the protruding bowel.

In the discussion on Dr. Russell Andrews' paper, Dr. CUTHBERT LOCKYER related details of a case of hæmatoma occurring during the fifth month of pregnancy. The patient was seen in March, 1908, in consultation with the late Mr. Stanley Boyd and Dr. Mitchell Bruce. Three days previously she was seized with general abdominal pain which was soon confined to the right side and back. The pain was accompained by nausea, retching and frequency of micturition. Attacks such as this recurred several times during the next two days, and on the third day the pain and retching lasted for four hours. In the intervals between the attacks the patient felt quite well excepting for an "aching in the right side" of the abdomen. There was a tense swelling occupying the right flank, quite apart from, and independent of, the gravid uterus; it was tender and fixed. A skiagram was taken and revealed nothing. There was a trace of albumen and also granular casts in the urine. In the light of the clinical history Dr. Mitchell Bruce thought that the swelling was due to the presence of a renal calculus. Cystoscopic examination showed the bladder and ureteral orifices to be healthy, the ureteral jets were clear, feeble, and infrequent on both sides. At the operation an incision was made over the anterior aspect of the mass in the right flank, and as soon as the flat abdominal muscles were divided a large hæmatoma was discovered in the extraperitoneal connective-tissues. The latter were dissected up by the clot which tracked round to the outer aspect of the flank. No explanation could be found for such a curious lesion, but as there had been two operations (also during pregnancy) for appendicitis (in May, 1904, and in January, 1905)—*i.e.*, three years previously, it was suggested that some of the old chocolate-coloured blood which was present might have been due to the latter of those two operations.

The wound healed and the patient went to term. During the remainder of the pregnancy careful dieting was necessary owing to the persistence of albuminuria and a low percentage of urea. Labour at term was spontaneous, the child was still-born, the presentation a breech. As four of the seven cases of hæmatoma related by Dr. Russell Andrews had occurred in pregnant women, Dr. Cuthbert Lockyer raised the question of an inter-relationship between this blood lesion and the gravid state. In two cases, the first of Dr. Andrews' series and the one now referred to by Dr. Lockyer, there were many points of resemblance. In each there was a tender dull swelling in the right flank, and also albuminuria and granular casts. In each a renal lesion was diagnosed. In each the tumour was adherent to the anterior abdominal wall and *old* blood escaped through the abdominal incision. Finally in each case the child was born dead. In these two cases it seemed quite reasonable to infer that changes had occurred in the blood-stream, the nature of which was to be found in the co-existence of pregnancy. Schmorl and others had shown that in eclampsia pulmonary emboli containing syncytial masses have been found, and where such emboli are present local hæmorrhages result. It is evident that histological proof—*i.e.*, the demonstration of the presence of chronic (syncytial) emboli in large parietal hæmatomata, is never likely to be forthcoming, but it seems fair to assume that these lesions are yet another example of the morbid processes which can be brought about by placental products.

Dr. ANDREWS said that he thought it was possible that some cases of painful swellings of the abdominal wall during pregnancy diagnosed as dermoids were really cases of hæmatoma of the abdominal wall.

Dr. F. J. MCCANN read a short communication on a

CASE OF ABDOMINAL PREGNANCY, PROBABLY PRIMARY.

A patient, æt. 35, had had three children. In her fourth pregnancy there were no symptoms to suggest that it was in any way abnormal, and slight labour pains came on at the time when they were expected. These pains passed away, and there were epigastric pain, vomiting, distension of the abdomen, and before long partial intestinal obstruction. A few days later Dr. McCann was able to diagnose that the pregnancy was extra-uterine. He opened the abdomen and removed a dead, fully-developed child and the uterus, on the posterior surface of which the placenta was inserted.

Dr. McCann thought that this was a case of primary abdominal pregnancy.

Dr. JOHN PHILLIPS read a paper on

ACUTE HEPATIC TOXÆMIAS COMPLICATING PREGNANCY AND LABOUR.

In bringing the subject forward for discussion he noted that no previous consideration of this important complication of pregnancy and labour had ever taken place before this Society. He related five cases arising in just over 2,000 carefully recorded cases of labour in private practice, which presented many similar features and which could be placed in one group. Many of the symptoms were similar to those observed in acute yellow atrophy and late chloroform poisoning. These symptoms were carefully compared, and the author concluded that the disease in his cases was due to an ascending toxæmia of the bile ducts.

The PRESIDENT thought it noteworthy that only five cases of hepatic toxæmia had occurred in a total of two thousand deliveries. He judged from this fact that a special combination of morbid conditions was needed to bring about the storm. Again, the rapid fatality in two of the cases and the milder attack in those which recovered suggested the same idea of varying intensity of combination. In formulating any theory, three factors would have to be considered: (1) The changes in the liver cells associated with fatty metamorphosis; (2) the action of toxic substances ascending by way of the bile ducts from the intestine; and (3) the influence of chloroform as a determining cause. Chloroform as a "primary" cause could be put out of court, for otherwise these cases would occur more frequently, but the drug might help sometimes to precipitate an attack by encouraging acidosis. Sir Lauder Brunton had taught us that an important function of the liver was to deal with poisons entering the portal circulation from the intestinal tract, and to prevent them from passing into the general circulation. Such poisons might be in such excess as to destroy the hepatic structure and functions, as in the case of acute yellow atrophy—or the liver might be functionally inadequate to deal with these poisons, though the latter were only present in such quantities as could be easily disposed of by healthy organs. Regarded from this point of view, acute yellow atrophy was not a disease of itself, but merely represented the most severe degree of hepatic toxæmia. Time did not permit of discussion regarding the changes which took place in the hepatic cells, but physicians and pathologists were in agreement that fat storage and fat infiltration were marked in the liver as well as in other organs during pregnancy. The influence of these changes on the resisting power of the liver tissue was obvious. The President quoted two cases of

hepatic toxæmia which had occurred in his own practice, and laid stress on the fact that in both instances signs and symptoms of intestinal disturbance had manifested themselves for some days before the onset of severe disease. He agreed with Dr. John Phillips that the mischief was started by intestinal disease and spread along the line of the hepatic vessels and ducts. Fatty metamorphosis and chloroform inhalation were possibly additional factors in determining the onset and severity of the symptoms.

Dr. AMAND ROUTH thought the title of Dr. Phillips' paper might be altered to "Toxæmia in Pregnancy Affecting the Liver," for he thought true pregnancy toxæmia began in the cells of the chorionic villi and affected different secreting or glandular organs, according to the type of toxin or the condition of the patient's organs. The question of the efficiency of the anti-toxins formed to counteract the physiological toxins had also to be considered. Possibly the anti-toxins, if in excess, might cause a true toxæmia. Most of Dr. Phillips' cases were associated with Bacillus coli cystitis, and in such cases the liver troubles might be due to ascending intestinal infection by the same organism or by toxins derived from those bacilli. If so, those cases were not due to true "toxæmia of pregnancy," but, directly or indirectly, were due to infection.

Dr. WALTER GRIFFITH, Dr. EARDLEY HOLLAND and Dr. HERBERT WILLIAMSON also discussed the paper.

Dr. JOHN PHILLIPS, in reply, said: I am much obliged for Dr. Walter Griffith's kind words. Dr. Routh finds great difficulty in defining "toxæmia," and I think that is the general feeling. I quite agree with Dr. Williamson that the five cases described are capable of sub-division, and that case 2 was in all probability a case of late chloroform poisoning. The term "ascending toxæmia" was given to those cases for want of a better term.

SECTION OF SURGERY.

AT a special meeting of the Section to be held on Wednesday, July 12th, at 5 p.m., Dr. Fred H. Albee, of New York, will give a cinematograph demonstration of his methods and *technique* of bone surgery, including bone grafts for Pott's disease, inlay grafts for fracture of long bones, peg grafts for fracture of the neck of the femur, etc.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF STATE MEDICINE.

MEETING HELD FRIDAY, APRIL 14TH, 1916.

The President, W. A. WINTER, M.D., F.R.C.P.I., in the Chair.

THE DISTRIBUTION OF CEREBRO-SPINAL FEVER IN A MILITARY CAMP.

DR. NESBITT read a note on the above, which was published in THE MEDICAL PRESS AND CIRCULAR, May 24th, 1916, page 469.

Exhibit.—Dr. Kirkpatrick exhibited two old London Bills of Mortality for the years 1685 and 1686.

THE WINTER OF 1915-16.

Sir JOHN MOORE, D.P.H., read a paper, illustrated by lantern slides and by copious statistics, bearing on many unusual features in the weather of the past winter. It had been characterised by a very cold November; a stormy, wet, and open December; a stormy and exceptionally warm January; a cold, windy, and rainy February; and a very cold and snowy March.

The rainfall of the six months ended March 31st, 1916, was, in Dublin, 21.711 inches on 120 days, compared with an average of 13.970 inches on 102 days. In other words, the rainfall exceeded the average by 55 per cent., and the rain-days by nearly 20 per cent. The large rainfall of November was accounted for by the downpour which accompanied the tempest of the 11th and 12th, during which 2.537 inches fell in Dublin. The warm January was rainy in the south and west of Ireland, but Dublin received only 1.398 inches of rain compared with an average of 2.210 inches, and the month was dry in the east and south-east of England. The copious precipitation in March came with cold N.E. winds, and consisted largely of hail and snow.

The key to the conditions indicated as characterising the past winter was to be found in:—

(1) The distribution of atmospheric pressure over the Atlantic and Western Europe.
(2) The resulting prevalent winds: their force or weakness.
(3) The presence in the atmosphere of an undue quantity of matter in the form of dust—chemical or otherwise.

The harmful effect on human life of the bitter cold of February and March was shown by the increased mortality from diseases of the respiratory system, and especially from pneumonia in Dublin during those months as compared with January. Fourteen weeks of the year, 1916, were completed on April 8th. In the first seven weeks, the registered deaths from pneumonia numbered 70, and those from other diseases of the organs of respiration 113. In the second seven weeks the corresponding numbers were 133 and 235 respectively. In the case of pneumonia the increase was 90 per cent., in that of other respiratory affections it was 108 per cent.

SPECIAL REPORTS.

VISIT OF FRENCH PROFESSORS TO EDINBURGH.

RECEPTION BY THE UNIVERSITY OF EDINBURGH ON JUNE 8th.

ADDRESS OF WELCOME BY PROFESSOR SIR THOMAS R. FRASER, M.D. Dub., F.R.C.P.Ed.,

Hon. Physician to His Majesty the King in Scotland.

GENTLEMEN,—In your name I have the pleasant task of very cordially welcoming to the University the distinguished delegates of our gallant ally, France. We are proud to receive them. We are gratified that they represent so many of the higher educational and academic institutions of their country—not of Paris only, but also of Lyons, Grenoble, Clermont, Montpellier, Nancy, and Poitiers.

The visit recalls the specially close relations of friendship and co-operation that have existed between France and Scotland for many centuries, and have on more than one occasion been cemented with blood. The desire that it should be continued and maintained has been shown by the existence of the Franco-Scottish Society, which I understand will show the reality of its friendship by co-operation in the general desire to aid our visitors in acquiring information regarding Edinburgh and Scotland. Before the present one, there has, however, been no formal or official visitation since April, 1884,

when with almost unprecedented success the University celebrated the tercentenary of its foundation.

It is my good fortune to be one of the few survivors in the Senatus of this epoch-making event. We then received, through their numerous representatives, the congratulations of practically every civilised nation and educational institution in the world. We regret that the distorted arrogance of some of these nations, and even of their most educated classes, has disappointed us in the full expectations of friendship then originated. We all the more rejoice that the bonds of union between many of these nations, including France, have been unbroken and, indeed, drawn closer by the momentous events of the last few months. At our tercentenary, the same learned bodies who have to-day honoured us were represented, and from France many men whose names are historic to the annals of philosophy and science. Among them I may be permitted to mention Mégierès, Perrot, D'Abbadie, Gréard, Chauveau, Caro, De Lesseps and Pasteur. In the interval of 32 years that has elapsed since our tercentenary celebrations the University has made much progress. In 1884, the number of professors was 46, there are now 59; in the former year the number of lecturers was only 3, to-day it is 94. Practical instruction and research were, in 1884, scarcely recognised or deemed a part of higher education. They were most meagrely provided for. Now the great part of our much enlarged accommodation is occupied by well-equipped laboratories for these purposes, which I hope our distinguished visitors will have an opportunity of inspecting. It is unfortunately the case, however, that the full life and activities of the University cannot at present be exhibited. The requirements of the devastating war in which, with our gallant Allies, we are engaged against a ruthless and unchivalrous enemy—the patriotism of our alumni and teachers—have depleted our numbers so that, while our Matriculated Students in 1913-14 numbered 3,283, their number has fallen in the present session to 1,797.

This number will next session be further reduced, as all eligible students will be required to give their services to the State, except those of the fourth and fifth years in the Faculty of Medicine. At the same time the University has given up some of its buildings for war purposes; and in several of its departments, such as those of engineering, natural philosophy and physiology, professors and students are undertaking much research work for the Government in physical and medical subjects.

Those who have joined the active services will take their part in defending their country and kinsfolk, and in preserving the liberties and humane conceptions and international morality of civilised mankind. Before the recent passage of the General Service Act, upwards of 4,500 graduates and students had joined the Services—or 1,217 more than the total number of matriculated students (both men and women) in the Session 1913-14. Of these at least 170 have been killed in action or otherwise in war service, 126 have been wounded, 2 are missing and 8 are prisoners. They have acquitted themselves well, as military honours and decorations have been conferred on upwards of 77, while other 90 have been mentioned in dispatches.

We do not as yet know how many others of them have perished in the destructive naval victory of Horn Reef. We do know, however, that other two members of the University have met with an untimely end in the deplorable catastrophe that overtook H.M.S. *Hampshire* recently—namely, Lord Kitchener and Sir Hay Donaldson, a member of his Staff.

The circumstances of Lord Kitchener's death may recall those of his friend and military guide and teacher, Lord Roberts, also an Honorary Graduate of this University. The latter also was the greatest British General of his time—the untiring and too often unappreciated prophet of the dangers of unpreparedness—and he unexpectedly perished in France while engaged in a mission to the British and Indian troops.

Lord Kitchener's death adds to the sorrow and Academic gloom still remaining after the death of our late greatly distinguished principal, Sir Wm. Turner. We have now to lament the loss of our Lord Rector. These bereavements, as our guests will understand, have led to some curtailment in the expression of our hospitality, but I am sure not in the warmth and cordiality of our welcome. We lament Lord Kitchener's death with the whole nation, with our Allies, and all the neutral powers, and with all of our enemies who yet retain the attributes of chivalry and humanity. His death I feel sure will not in the least degree lessen the unalterable determination of this Empire and of its faithful Allies to continue unflinchingly the task which has been impressed on them of curbing the arrogant assumptions and the menace to liberty and civilisation of our inhuman Germanic enemy. The few hours that have separated the destruction of the *Hampshire* from the naval engagement in the North Sea seems to render it almost one of its episodes. We may congratulate ourselves that this naval engagement will restrict even more closely than before the predatory aims of the German Navy. It has raised still higher the ardent desire of our gallant seamen to encounter the ships of the enemy whenever they leave the protection of their carefully prepared appliances of destruction, and refrain from fleeing to this protection when no longer in overwhelming force.

We are determined also to gain a decisive victory on land. We are fortunate in the most efficient co-operation of the gallant nation so well represented by our guests, as well as in that of Russia and Italy and Belgium. We are confident that the bravery and martial spirit displayed in the East as well as in the West will lead to that result. Our admiration is great for the valour and resource of our French Ally in the unprecedented battle of Verdun.

After the conclusion of such a victorious peace, we have to recollect that we shall enter on another war—a war of commercial and manufacturing industry and rivalry, upon which the fate of nations will largely depend.

Upon us, who are the leaders and representatives, will fall the patriotic duty of initiating and supplying the required education. I apprehend that our educational systems and methods will require remodelling, so as to increase the facilities for advanced instruction in a wider range of the community than is now overtaken. A great lesson which the war has expounded is that expansion is required not only in general education, but especially in science and technology, in finance and commerce and modern languages, and in the physical training of the body, and perhaps also in mental and moral discipline.

In the name of the University, I would again most cordially welcome our guests and place at their disposal all the means that we possess for furthering the objects of their visit to this University and to the Capital of Scotland.

Dr. Jonathan Brumwell, M.D., of Barden, Victoria Avenue, Shanklin, left £17,122.

Mr. George Gray Anderson, of Wimbledon, left £50 to the Scottish Hospital in London.

OBITUARY.

DR. W. W. WEBBER, L.R.C.P.Ed., M.R.C.S.Eng., CREWKERNE.

The death has occurred at Crewkerne of the oldest medical practitioner in the town—Dr. William Woolmington Webber. Dr. Webber was a Crewkerne School Exhibitioner in 1873. He received his medical training at St. Thomas's Hospital, and qualified M.R.C.S.Eng. in 1880, and L.R.C.P.Edin. in 1882. He then became associated with the late Dr. Cox, of Crewkerne, and, on the death of that gentleman many years ago, succeeded to his practice. He continued in active work up to within a couple of days of his death. Dr. Webber was formerly associated as a medical man with a good many of the Friendly Societies in the district, and, as Poor-law Medical Officer, he was well known throughout the countryside. He was Medical Officer of the Crewkerne Urban District Council and Surgeon to Crewkerne Hospital. The deceased, who never married, was about 52 years of age.

DR. F. J. WADD, M.B., M.R.C.S., RICHMOND.

Dr. Frederick John Wadd died at Richmond, Surrey, on June 12th, at the age of 71. Deceased, who received his medical training at St. Thomas's Hospital, qualified M.R.C.S.Eng. and L.S.A.Lond. in 1866, and in the same year proceeded to the M.B., C.M. of Aberdeen. He was Honorary Surgeon to the Richmond Hospital, and was for many years the family physician to the Duke and Duchess of Teck when they resided at White Lodge. He attended the Queen at the birth of the Prince of Wales. Dr. Wadd took an active part in local affairs, and served for twenty-two years as a member of the Richmond Town Council, occupying the position of chairman of the Health Committee for seventeen years.

DR. W. ANDERTON, F.R.C.S., ORMSKIRK.

The death occurred on June 12th of Dr. W. Anderton, of Ormskirk, after a sharp attack of pneumonia. He had been ill a week, but no serious complications were feared until almost the last. His death removes one of the oldest and best-known practitioners in South-West Lancashire.

Dr. Anderton was 68 years of age. Educated at Liverpool and Edinburgh, he qualified L.R.C.P. and S.Edin. in 1872, M.R.C.P. and F.R.C.S. in 1881. He was the medical officer of health for the Ormskirk Urban District Council for over 40 years, holding the position up to his death. He had also been medical officer of health and public vaccinator for the Ormskirk Union for over 40 years, retiring in 1913; but on Dr. John Young, his successor, joining the colours, he resumed again. He was also senior surgeon to the Ormskirk Dispensary and Cottage Hospital, and visiting physician to the Ormskirk and Lathom and Burscough Joint Hospital Board. He was a member of the Liverpool Medical Institution, and was held in the highest esteem by his professional brethren.

He leaves a widow, two sons, and two daughters.

At a conference on sanitary administration under war conditions held in London, on June 9th, the Lord Mayor presented the Henry Saxon Snell prize of fifty guineas and the silver medal of the institute to Dr. William Hanna, assistant port medical officer, Liverpool, for an essay on suggestions for improving the sanitary arrangements and appliances on board ships. The Lord Mayor said it gave him special pleasure to present the prize to a competitor from his native town.

Mrs. Hannah Greaves, of Southport, Lancs, left £200 to the Middleton Cottage Hospital.

Deputy Surg.-General Eugene Francis O'Leary, M.D. (retired), of Sidmouth, left £18,627.

MEDICAL NEWS IN BRIEF.

Maternity and Child Welfare.

Dr. F. G. Haworth, Medical Officer of Health for Darwen, in a report on the subject of maternity and child welfare, says:—"I would recommend that a sub-committee be appointed from the members of the Town Council, and a meeting be held, composed of this sub-committee and the medical men practising in the town, to discuss the particular lines on which this treatment can be carried out, and to draw up regulations of the times at which the doctors can meet their patients. The point of venue might be at the doctor's surgery or at the school clinic—the former might for many reasons be more convenient, as then the patients would receive any medicine required at the time. I would make it incumbent on all mothers with babies under twelve months old to attend the Mothers' Club, where they could consult their own doctors on all light ailments from which their babies may be suffering at that particular time; these meetings to be held weekly instead of fortnightly, as is at present the case. This would bring the babies more frequently under the notice of the doctor, and there would not be the danger of a disease running too long before the case was seen by a medical man. It would *ipso facto* increase the number of members of the club and *pro rata* increase the benefits, the doctors to attend this club in rotation and the work to be done under the supervision of the Medical Officer of Health. Any mother desiring information or advice on all matters pertaining to the period before childbirth, and also on any other period, may do so from her own doctor at the meeting of the Mothers' Club. Any doctor not keeping his appointment at the club a certain number of times will be asked to withdraw his services from this work. In the case of children from twelve months old up to the school age—viz., five years—to attend at his or her doctor's surgery for treatment. After this time the school children come under the care of the School Medical Officer until they reach the age when they become insured persons. With the exception of very minor ailments, they will also be attended by their own doctor during the school period."

Doctor as an Army Absentee.

In the Oban Sheriff Court, on June 9th, before Sheriff-substitute Wallace, John Cameron MacCallum, M.B., Ch.B., Muckairn Manse, Taynuilt, recently Executive Tuberculosis Officer and Assistant Medical Officer for the county of Argyll, appeared on a charge of having been deemed to have been enlisted and transferred to the Army Reserve under the Military Service Act, 1916, and having failed to report himself at Stirling Castle on 30th ult. in accordance with the requirements of notice served on him. The accused pleaded not guilty, and in reply to the Sheriff-substitute admitted a breach of the Statute, but in view of the conscientious objections he held to participating in war service in any capacity he maintained he could tender no other plea than that of not guilty. He acknowledged that he had not received a certificate of exemption as a conscientious objector, although he had applied for one. Formal evidence having been led by the Procurator Fiscal, the Sheriff-substitute convicted accused and sentenced him to pay a fine of £2 or one week's imprisonment. On leaving the dock Dr. MacCallum was taken into custody by a military escort.

Municipal Creches for Birmingham.

The question of providing municipal crèches in Birmingham was brought before the Public Health and Housing Committee of the City Council, on June 9th, by the Lord Mayor (Alderman Neville Chamberlain), and it was decided to make inquiries as to the need for and the possibility of putting a scheme in operation. The committee are considering this matter purely as a war-time measure, for they are not at all favourable to the idea of maintaining crèches in ordinary times and unnecessarily relieving mothers of responsibilities they ought to bear. But at present they have to face the fact that mothers have gone,

and are going, into munition factories where their services are urgently needed, and it is felt that however much they may try to avoid it their children are not being as well looked after in their absence as is desirable. The committee have been given power to start a crèche as an experiment if the inquiries are satisfactory, but the Lord Mayor is of opinion that the evidence will show eight or ten crèches will be required to meet the needs of the whole of the city. He also suggested to the committee that these crèches should be established in open districts or gardens, so that the children will get plenty of fresh air.

Bournemouth Consumption Sanatorium.

THE Earl of Eldon presided over the annual meeting of the Royal National Sanatorium for Consumption and Diseases of the Chest, Bournemouth, held on June 14th. The Committee of Management in their report stated that the good work of the Institution had been maintained. The total number of patients treated last year was 506. The numbers discharged were 186 men and 220 women; 14 patients had died, and 86 were still under treatment. The patients came from all parts of England and Scotland. There were also seven Belgian refugees. There was again an excess of income over expenditure, and the substantial balance was due largely to the exceptional amount received from legacies and the great effort made to effect economy. Only the most urgent repairs had been carried out, and this would mean a considerable outlay at the end of the war. In spite of every care there had been an increase of £500 over the expenditure of the previous year, and there had been a further decrease of £150 in the annual subscriptions.

Lord Eustace Cecil, in moving the adoption of the report, said that the institution did a great deal of good and was carefully administered. The cost per week per patient had increased considerably.

The report was adopted.

Commissions for Home Service.

IT is stated that the War Office have decided to grant commissions in the Royal Army Medical Corps to doctors between 45 and 55 years of age volunteering for whole time general service in the United Kingdom. This will allow the release of younger men for active service abroad.

Council of the Royal College of Surgeons.

THE annual election to the Council of the Royal College of Surgeons will take place on July 6th. There are four vacancies, and the following is a list of the candidates:—W. F. Haslam, Birmingham; T. H. Openshaw, London Hospital; Raymond Johnson, University College Hospital; John Murray, Middlesex Hospital; V. W. Low, St. Mary's Hospital; H. S. Pendlebury, St. Mary's Hospital; and F. J. Steward, Guy's Hospital.

Carlisle Death Rate.

AT the monthly meeting of the Carlisle City Council on June 14th, the decreasing birth-rate and increasing death-rate in the city were matters of comment by Mr. R. Dalton during some observations on the annual report of the Medical Officer of Health. Mr. Dalton also pointed out that the rate of infant mortality, which in 1915 was 144.3 per 1,000, was the eighth highest record during the last fifty years. That, he said, was rather remarkable in view of the fact of the enormous sums spent on health visitation.

Wellington's Medical "Chief."

AT a meeting of the Aberdeen University Court on June 13th, Principal Sir George Adam Smith, who presided, said that in the end of April he received a letter from Sir J. R. D. M'Gregor, Bart., intimating his willingness to convey to the University of Aberdeen a painting of the quadrangle of Marischal College, as it was before the recent additions, and including the obelisk which used to stand in the quadrangle, and which was now in Duthie Park. He said to Sir James M'Gregor that he had no doubt that the University Court would gladly receive that painting. Now that it had come, he felt more grateful than ever to him for sending it; and they accepted it for their collection of historic and other paintings with gratitude. (Applause.) They would empower him to write Sir James M'Gregor, expressing the thanks of the whole University for his valuable and interesting gift, as a memorial of one of the most illustrious medical graduates which his University ever had—Sir James M'Gregor, chief of the Duke of Wellington's medical staff in the wars in the beginning of the last century, and the man who thoroughly reformed the administration of the military medical service in Great Britain. The gift came to them at the present time with very great appropriateness. (Applause.)

Shoreditch Guardian loses Seat through Child's Illness.

As a result of one of his children being taken ill with an infectious disease, Mr. C. E. Taylor has lost his seat on the Shoreditch Board of Guardians. Because no accommodation was available at the Metropolitan Asylums Board Fever Hospital the child was removed to the Infirmary. Thereupon the Guardians sought counsel's opinion, which was that Mr. Taylor had lost his right to sit upon the Board. The Guardians on June 15th decided by six votes to two to declare the seat vacant.

"I shall be here. I shall come. Don't worry; you have had some rows here in the past, and take it from me that you will have some in the future," Mr. Taylor declared, as he left the room.

British and German Food Prices.

ACCORDING to the *Board of Trade Gazette* of June 16th, retail prices of food in the United Kingdom on June 1st were higher by 2½ per cent. than on May 1st. British and imported meat advanced about 8 and 9 per cent. respectively on the average, or about ¾d. to 1d. per lb. As compared with June 1st, 1915, the retail prices at the opening of the present month showed an average increase of 20 per cent., potatoes and granulated sugar rising by 60 and 50 per cent. respectively. The average increase in the retail prices of food over the whole country since the beginning of the war may be put at 59 per cent., or 53 per cent. if the increase in the duties on tea and sugar is deducted. The average increase in the cost of living of the working classes, taking food, rent, clothing, fuel and light, etc., into consideration, between July, 1914, and the present time, is about 40 per cent., disregarding increased taxation and assuming that the standard of living has not been modified in view of war conditions.

In Berlin in April a further rise of nearly 10 per cent. was recorded in the general level of food prices, the index number of the total rise since July, 1914, being thus brought up to close on 120 per cent.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

LETTERS TO THE EDITOR and Original Papers intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of bona fides. These should be addressed to the Editor at the Offices of this Journal: if in Ireland, to the Dublin Office, 29 Nassau Street; from other parts of the United Kingdom, these should be addressed to the London Office, 8 Henrietta Street, Strand.

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Small announcements of Practices, Assistances, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

WORKMEN'S COMPENSATION ACT, 1906.

THE Secretary of State for the Home Department gives notice that, in consequence of the resignation of Dr. J. W. Batterham, one of the Medical Referees under the Workmen's Compensation Act, 1906, for County Court Circuit No. 50 (Eastbourne, Hastings and Rye) the appointment held by him will be vacant as from the 18th inst. Applications for the post should be addressed to the Private Secretary, Home Office, Whitehall, London, and should reach him not later than July 1st.

LEVEN (Hulme).—We have made a note of your view. You will find the matter discussed by "Sinapis" in our present issue

33-IN. ADDER.

AN abnormally sized specimen of the adder, measuring 33 in., was killed by Mr. Neil Baxter, at Ardura, and it is believed to be the largest every found in Mull.

TIGHT MONEY!

MEDICAL examiners for the United States Marine Corps state that men are taller in the morning than in the evening. Nevertheless, some men, after they have been out for the evening, find themselves shorter in the morning.—*The Globe.*

ANOTHER INDIGNITY!

A COLCHESTER woman has been engaged to act as superintendent of a number of conscientious objectors who are learning to do work on the land at an Essex farm.

E. M. J. (London)—We have received the book and noted with interest its contents.

SHAKESPEARE'S CRADLE?

An Elizabethan oak cradle marked in contemporary carving, "W. S., 1564" (initials of William Shakespeare and date of his birth), will shortly be sold at Sotheby's. The cradle came originally from Bidford, some fifteen miles from Stratford.

SOUTH AFRICAN MILITARY HOSPITAL.

THE South African Military Hospital, which is being erected on a site in Richmond Park, granted by the King, is now practically completed. Subscribers to the South African Hospital and Comforts Fund inspected the hospital on June 17th.

S. M. (Weymouth).—He will not be drawn into controversy.

GERMAN STUDENTS AND THE ARMY.

FIFTY-FIVE thousand German students are now enrolled in the German Army, according to an official return issued in Berlin. The number of male students actually attending lectures at German Universities is thus only 2,400, all of whom are physically unfit for military service of any kind.

BERLIN'S DECREASING POPULATION.

SINCE the beginning of the war the population of Berlin has decreased by 400,000.

"CHILDREN'S SALON" AND HOSPITALS.

AT the 26th annual competitions of members of the "Children's Salon" on June 17th, it was stated that 433 fairy godmothers had undertaken to write to or send gifts to some poor child The "Salon" has founded eleven cots in the various London hospitals.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, JUNE 21ST.

ROYAL METEOROLOGICAL SOCIETY (70 Victoria Street, Westminster, S.W.).—4.30 p.m.: Paper—Lieutenant E. H. Chapman, R.E.: The Relation Between Atmospheric Pressure and Rainfall at a Single Station.

THURSDAY, JUNE 22ND.

ROYAL SOCIETY (Burlington House, London, W.).—4.30 p.m.: Croonian Lecture—Prof. S. J. Hicksyn: Evolution and Symmetry in the Order of Sea-pens.

FRIDAY, JUNE 23RD.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY (West London Hospital, Hammersmith Road, W.).—8.15 p.m.: Cavendish Lecture—Sir John Bland-Sutton: The Fate of Patients who have had Stones removed from the Kidney.

Vacancies.

Omagh.—Temporary Medical Officer. Salary £4 4s. per week. Apply to John Patrick, M.B., Res. Med. Supt. (See advt.)

Derbyshire Royal Infirmary, Derby—House Surgeon. Salary £200 per annum, with board, residence, etc. Applications to E. Forster, Secretary.

Manchester Northern Hospital for Women and Children, Park Place, Cheetham Hill Road, Manchester.—Lady House Surgeon. Salary £120 per annum, with apartments and board. Applications to Mr. Hubert Teague, Secretary, 38, Barton Arcade, Manchester.

Bury Infirmary.—Junior House Surgeon. Salary £150 per annum, with board, residence, and washing. Applications to the Hon. Secretary, Infirmary, Bury, Lancs.

West Riding Yorkshire.—Middleton-in-Wharfedale Sanatorium, nr. Ilkley.—Lady Assistant Medical Officer. Salary £300 annum. Applications to Francis Alvey Darwin, Clerk of the County Council, County Hall, Wakefield.

Great Yarmouth Hospital.—House Surgeon. Salary £200 per annum, with board, lodging, and washing. Applications to Richard F. E. Ferrier, Hon. Secretary, 16, South Quay, Great Yarmouth.

Huddersfield Royal Infirmary.—Senior House Surgeon. Salary £150 per annum, with board, residence, and laundry. Applications to Mr. J. Bate, Secretary, Royal Infirmary, Huddersfield.

The Guest Hospital, Dudley.—Senior Resident Medical Officer. Salary £150 per annum, with board, residence, and washing. Applications to the Secretary, at the Hospital.

London Temperance Hospital, Hampstead Road, N.W.—Assistant Resident Medical Officer. Salary £120 per annum, with residence, board, and laundry. Applications to the Secretary.

Births.

DICK.—On June 11th, at Tadworth, Surrey, the wife of F. A. Dick, M.B., Lieutenant, R.A.M.C. (T.), of a daughter.

HAY.—On June 17th, at 14, Vicarage Gardens, Kensington, W., the wife of Dr. K. R. Hay—a daughter.

HENDERSON.—On May 18th, at Fairmount Heights, Eugene, Oregon, to Dr. and Mrs. McClelland Henderson—a son (stillborn).

JUSTICE.—On June 15th, at 55, Palace Gardens Terrace, W., the wife of Major W. A. Justice, I.M.S., Madras, of a son.

PAYNE.—On June 12th, at Lansdowne House, Alton, Hants, the wife of O. V. Payne, M.B., B.C., of a son (still-born).

POWELL.—On June 12th, at Harrogate, the wife of Major Jack Powell, R.A.M.C., Cairo—a son.

RODGERS.—On June 13th, at Hollin's Lane, Winwick, Warrington, the wife of Fred Rodgers, M.D., Major, R.A.M.C. (temporary), of a son.

SIDGWICK.—On June 12th, at "Fircot," Ashby Parva, Lutterworth, the wife of Major Sidgwick, R.A.M.C.—a daughter.

SPEIRS.—On June 13th, at 232, Old Kent Road, S.E., the wife of T. Orr Speirs, M.D. (Glasg.)—a son.

THURLOW.—On June 10th, at Easdale, Frant Road, Tunbridge Wells, to Dr. and Mrs. Basil L. Thurlow—a daughter.

WRAITH.—On June 11th, 1916, at Gwynant, Hampton Park, Hereford, the wife of Oswald S. Wraith, M.D., F.R.C.S.E., of a son.

Marriages.

ADAMSON—TURNBULL.—On June 15th, at St. Mary's, Harrow-on-the-Hill, by the Rev. A. M. Bashford, J. D. Adamson, Lieut., R.A.M.C., to Edna Turnbull, eldest daughter of Mr. and Mrs. J. H. Turnbull, of Winnipeg, Canada.

COX—COATE.—On June 14th, at St. Matthew's Church, Luton, Beds., William Joseph Cox, M.B., Ch.B., D.P.H., elder son of the late Joseph Cox, Esq., of Rotherham, Yorks, to Frances Henrietta Coate, youngest daughter of the Rev. Harry and Mrs. Coate, of St. Matthews's Vicarage, Luton.

FRASER—BAILEY.—On June 13th, at Golden Hill Parish Church, Captain Forbes Fraser, F.R.C.S., of Bath, to Agnes Mary, daughter of the Rev. G. R. Bailey, Vicar of Golden Hill and Rural Dean of Newcastle, and Mrs. Bailey.

KILNER—SIMPSON.—On June 10th, at St Leonard's Church, Horringer, Lieut. Henry Goff Kilner, R.A.M.C., second son of Dr. and Mrs. Chas. Scott Kilner, of Bury St. Edmunds, to Mabel Olive, only daughter of Mr. and Mrs. R. T. Simpson, of Horsecroft, Bury St. Edmunds.

LINK—FOWLER.—On June 17th, at Ilford, Captain O. C. Link, M.B., B.S., R.A.M.C., second son of Mr. and Mrs. G. D. Link, of 34, Mansfield Road, Ilford, to Grace Madeline, eldest daughter of the late W. Fowler and Mrs. Fowler, Ilford

ORR EWING—SHAW.—On June 15th, at St. Mary's Church, Wimbledon, Capt. Hugh J. Orr Ewing, R.A.M.C., only son of the late John Orr Ewing and Mrs. Orr Ewing, of Weston-super-Mare, to Muriel Isabel, eldest daughter of Mr. and Mrs. Ernest E. Shaw, of Wimbledon.

PUNCH—SHORROCKS.—On June 3rd, at Holy Trinity Church, Northwood, Middlesex, Dr. Arthur Lisle Punch, youngest son of J. J. Punch, Esq., of Bedford Park, to Dorothy, youngest daughter of Mrs. Shorrocks, of The Glen, Northwood

TINDAL-ROBERTSON—MARSDEN.—On June 14th, in London, Percy Tindal-Robertson, of the Albany, W., and Lincoln's Inn, to Edith Maude Marsden, M.B., Ch.B., of Oakenrod, Rochdale.

Deaths.

FOSTER.—On June 14th, at 10, St. George's Road, Eccleston Square, S.W., Joseph Foster, M.D., in his 76th year.

FREER.—On June 10th, at The Limes, Stourbridge, Alfred Freer, J.P., Co. Worc., Surgeon, son of the late William Henry Freer, Surgeon, Green Close, aged 87.

WADD.—On June 12th, at "Burvale," Richmond, Surrey, Frederick John Wadd, M.B., M.R.C.S., Honorary Surgeon to the Richmond Royal Hospital, aged 71 years.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX"

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AT THE PERIPHERY.

"Loué par ceux-ci, blâmé par ceux-là, me moquant des sots, bravant les méchants, je me hâte de rire de tout, de peur d'être obligé d'en pleurer."—BEAUMARCHAIS.

State Medical Service.

IF any of my readers had been in doubt about the reality of the threat to inaugurate a State medical service, the columns of the lay press during the last fourteen days would surely have convinced the most purblind. So unanimous has been the note, so mellifluous the tone, so persuasive the argument, that one is forced to the conclusion that the chorus has not only been inspired, but well trained. There is not, as I have before pointed out, anything intrinsically evil in a State medical service; there is, indeed, theoretically much to be said in its favour. It is quite obvious that there would shortly have to be some co-ordination of such medical services as are actually rendered to the State, and when we consider those which are authoritatively and quite reasonably projected, the case for a re-shuffling of the cards becomes overwhelming and insistent. The importance of the doctor to the community is now being recognised, and the community through its astuter representatives is busily engaged in partly flattering, partly depreciating, and wholly mesmerising the doctor into a mental condition of complete blindness to his own interests.

An Annual Report.

THE most recent sardonic touch and, as coming from a member of the profession, superficially one of the most telling, was elaborated in the Isle of Wight. The annual report which Dr. J. P. Walker, the M.O.H. to the Island, recently presented to his authority, has been the subject of much ribald comment in the daily press, which, as the following extract will show, was by no means unprovoked. Says Dr. J. P. Walker: "Medical success is not necessarily dependent upon a doctor's skill and knowledge; it depends upon much besides—for example, the size of his house, the luxuriance of his motor-car, the charm and ability of the doctor's wife—all these influence his worldly success. But should he venture to criticise those who employ him! How fares he, for example, should he tell his best-paying patient there is nothing really the matter with her, that she needs work, and that employment would rob her of all her fancied ailments? Should he tell his chief magnate that the death-rate from consumption is due to his germ-breeding cottages, how would he fare?"

Tact.

THIS can hardly be described as creditable either in manner or matter. The manner is relatively unimportant, but it affords a very good example of the "sloppiness" in medical writing which Dr. Mercier properly deplores. And as to the matter, surely a Medical Officer of Health could find something more worthy of a place in his annual report than this cheap cynicism at the cost of his own cloth. In so far as there is truth in these impertinent and ill-timed reflections, that truth is not only a commonplace of medical practice, it is a commonplace of human nature. Lack of the moral courage to endanger one's livelihood is by no means confined to medical men, who are, indeed, on the whole, far more courageous than men in most other callings; but they prefer as a rule to combine their courage with a virtue which does not seem to be very familiar to Dr. J. P. Walker, namely, the exercise of tact. When there are important matters to occupy men's minds, it is a great pity that such sorry stuff as this should find its way into the considered report of a responsible medical officer. If it is worthy of publication at all, the "Daily Mail" in the silly season is its proper place.

The Birth-rate Commission.

UNDER the title of "The Declining Birth-Rate: Its Causes and Effects," the National Birth-Rate Commission has issued a report—obviously *pour rire*. In a notice on the cover, the inquiry is called "exhaustive." If this is a suitable adjective to apply to the investigation, it is singularly inapplicable to the conclusions, which are for the most part purely platitudinarian; and where they venture outside that sacred area they are unsupported, insupportable, and almost certainly false. A glance at the names of those constituting the committee is sufficient to explain a good deal. There figure Bishop Boyd Carpenter, who is 75; Dean Inge, who is deaf; Sir John Gorst, who is dead, and the Duchess of Marlborough. There are, of course, a great many other names, among which I count six clerics, about thirteen doctors, of whom, suitably enough, four are women, or, if you include Dr. Saleeby, five. Very few of the total, even among the doctors, appear to have any special knowledge which

would enable them to contribute much of value to a very important and topically pressing question.

Its Findings.

THE Commission gravely assure us that it considers the following propositions duly established :—

1. That the birth-rate has declined to the extent of approximately one-third within the last 35 years.

2. That this decline is not, to any important extent, due to alterations in the marriage rate, to a rise of the mean age at marriage, or to other causes diminishing the proportion of married women of fertile age in the population.

3. That this decline, although general, has not been uniformly distributed over all sections of the community.

4. That on the whole the decline has been more marked in the more prosperous classes.

5. That the greater incidence of infant mortality upon the less prosperous classes does not reduce their effective fertility to the level of that of the wealthier classes.

From this it is evident that when you have assembled a number of clerics, "some" Duchess, and a few lesser members of the peerage, you will arrive at conclusions, sociological and physiological, which are both novel and epoch-making. But surely the Commission ought to have begun by informing us that births are the result of the conjunction of the two sexes. That is another proposition which may be said to be "duly established."

Its Evasions.

IT is characteristic of a mixed committee of this kind that it should evade the real issues which lie beneath the surface of the question of a declining birth-rate. It is quite in keeping that it should confine itself to the superficial and avoid the essential by informing us that in some women sterility is quite unavoidable, that in others sterility or relative infecundity is the result of design, and then to branch off into a fruitless discussion as to whether limitation of families is, or is not, moral or religious, or patriotic, or whatever obscuring adjective may be selected. The limitation of the family is an individual matter which each couple will always decide for itself; and if it decides for limitation, not all the religious diatribes nor all the moral musings, nor all the patriotic preachings will have the slightest effect upon the practice.

Higher Education.

THE Commission appears timidly to have ventured upon the fringe of the really important issues, but even here it is superficial. It opines that (7) "There is no reason to believe that the higher education of women (whatever its indirect results upon the birth-rate may be) has any important effect in diminishing their physiological aptitude to bear children." This is pure nonsense. There is, on the contrary, every reason to believe that the so-called higher education of women conduces to sterility, and that, short of actual sterility, it is very apt to lead to the birth of unsatisfactory children. The theoretical grounds in support of this last view are overwhelming, and the few facts which tell against it are negligible. But, as I have said, this is only the fringe of the really important issues.

Evasions.

THE words "whatever its indirect results upon the birth-rate may be," show that even in this matter of the "higher education" the report purposely avoids the kernel of the question. It did not require a commission to lecture us on the morality of the intentional limitation of families, or upon such of the causes of sterility in women as may be found accurately, but discreetly, set forth in Dr. Somebody's "Advice to Mothers." If it was to throw any light upon the problem of the declining birth-rate it should have been most searching in its inquiry into those indirect causes to which it is so lady-like in turning a blind eye. As a leading article in the *Times* properly points out, "no reference is made to the increasing prevalence of excessive stature among women and the modern addiction of girls to violent sports and exercises, and the possible connection of these things with natural fecundity."

Omissions.

AND these are not the only changes which have taken place in what the Americans call the "make-up" of women during the period of thirty-five years which has witnessed so decided a decline in the birth-rate. It is during those years that we have assisted at the rise of the suffrage movement, in itself mildly, perhaps, but certainly, inimical to fertility, and its offshoot the anti-man movement which is quite openly opposed to marriage and childbearing. Another ugly phenomenon which may, or may not, have a direct relation with these movements, is the undoubted and deplorable spread of the disgusting and degrading practice of lesbianism, a practice which, when rife in a community, must, of course, have a direct immediate and enormous influence in restricting the birth-rate. Every medical man of experience knows perfectly well that in the very classes in which the decline is most conspicuous this vice is most widely disseminated. To leave these and similar facts out of consideration in investigating the question of the birth-rate is characteristically British, hypocritical and ostrich-like. This omission alone is sufficient to rob this otherwise stupid report of any value whatever.

New Tests for Syphilis.

WE published last week an article from the pen of Dr. C. D. Gray, of Portland, Maine, an interesting article on "A Urinary Test for Syphilis and its Comparison with the Wassermann Reaction." We are certainly in need of a clinical method of testing for the presence of the *Treponema pallidum*, and if the results of Dr. Gray's investigations should be confirmed by other observers, his simple ingenuity will entitle him to the gratitude of future generations of clinicians. This week we have pleasure in publishing the details of a new test which has been

devised by Mr. J. R. McDonagh, whose work in connection with salvarsan is now so well known. Mr. McDonagh's test, it will be seen, is a blood-test; it has that in common with Wassermann's over which, however, it has the advantages of being much less complicated and much more accurate. It will be a satisfaction to many to be able to banish a test which was made in Germany and bears a German name, in favour of one which was made at home and bears the unassuming title of the "Gel" test.

Wittenberg.

FROM the account of the proceedings of the British Oto-laryngological Society, which appears in another column, it will be seen that the President, Mr. Charles Heath, and the members generally, take a very different view of the proper course to adopt in reference to the Wittenberg Camp abominations from that which was decided upon at a recent meeting of the Laryngological Section of the Royal Society of Medicine. At a recent meeting of the Section Sir William Milligan proposed, and Mr. Richard Lake seconded, a resolution framed in much the same spirit as that which prompted the action of Mr. Charles Heath. The resolution of the Section was defeated by twelve votes to nine; that proposed by Mr. Charles Heath was carried, not only with unanimity, but with enthusiasm. It is quite obvious that if expression is to be given to the feelings of abhorrence with which all medical men regard the behaviour of the monster Aschenbach and those who were behind him, the present is the proper moment for those feelings to become articulate. It is useless to wait until the end of the war, when there will be many reckonings of several kinds to be adjusted. Mr. Charles Heath and his Society have set an excellent example which I hope other medical bodies will not be tardy in following.

SINAPIS.

ELECTRO-THERAPEUTICS AND THE WOUNDED.

ONE of the little-discussed, but not the least important, of the many side issues of the war has been the enormous influx of hitherto untrained women into the lighter branches of the nursing profession. Prompted by a laudable desire to be of use to the wounded combatants, these women have joined the schools for massage in unprecedented numbers during the past year and a half. Massage attracts by the comparative brevity of its course of study and the rapid promotion to independent occupation without the severe and often unpleasant duties which fall to the lot of nurse and probationer working the livelong day in hospital wards. More than massage, however, is required for the stiffened and paralysed limbs of the convalescent soldier. The rapid and beneficial results of carefully graduated electrical applications are well known to every competent student of electro-therapeutics. Very soon after the war began it became obvious that the demand was far greater than the supply, that the practitioners skilled in electro-therapy and the nurses capable of carrying out their directions were too few to cope with the vast numbers of convalescents requiring their services. The Incorporated Society of Trained Masseuses endeavoured to meet this need by instituting courses of training in medical electricity, and certificates were given to those masseuses who passed an examination conducted by physicians. A text-book designed to meet the requirements of these students has been written by Dr. MaGill (1), and between the covers of the little volume are found all the necessary details to ensure a thorough understanding of every kind of cell, battery and bath in common use with electrical treatment. The newly qualified doctor and the medical student should find these minute descriptions of the various simpler apparatus and the general indications for their employment a useful introduction to the deeper treatises at present consulted only by the skilled specialist. We should hesitate to place such a publication in the hands of every student of massage, because we find no mention of the evil results of erroneous methods of treatment, no warning of risks less obvious, but not less injurious, than the "earth currents" very properly described and dealt with by the author. The nurse who has spent long years in hospital wards may avoid the dangers which are lightly incurred by the ignorant and hastily trained masseuse; it is less probable that she would give a light bath to a patient whose pulse is liable to run "over 100 and become irregular," or continue faradic applications to facial paralysis "till contraction ensues."

The war masseuse may easily commit such errors. Nor will the patient escape scatheless though the text-book injunctions to cease treatment on the occurrence of such symptoms be strictly adhered to. The average doctor may be unable to assist the electrically-trained masseuse, but the study and science of electro-therapy is now so far advanced that the soldier ought to have the advice and supervision of the specialist in that subject. No patient is permitted to take Nauheim or other medicated baths at his own discretion, and it is of even greater importance that the maimed arms and legs of our heroes should be guided back to usefulness by the careful treatment obtainable only from the electro-therapeutist who has years of observation to guide his prescription of dose, frequency and modality of electrical application. We speak with concern and anxiety, for it has come to our knowledge that in some cases the decision as to the treatment of helpless limbs has been left to the manufacturing electricians who supply the battery to the masseuse. That such incompetence can have such power at the present day, when in America and in many European countries there flourish medical journals devoted entirely to the study of electro-therapy, is a disgrace that demands prompt remedy. The life-long consequences, for good and evil, of electrical treatment should be made more widely known, so that the soldier's advisers can demand and expect for him the expert services of the electro-therapeutist just as readily as they can at present obtain the skilled assistance of the dermatologist, the aurist and the oculist.

(1) "Notes on Galvanism and Faradism." By E. M. MaGill, M.B., B.S., D.P.H. Pp. 220; 67 illustrations. London: H. K. Lewis and Co., Ltd. 1916.

CURRENT TOPICS.

The Irish Medical Association.

THE presidential address to the Irish Medical Association, delivered last Wednesday by Dr. Marlay Blake, and published in this issue, deals with most of the activities of the Association in the past year, as well as with those that may fairly be expected of it in the future. No better example of the value of united action can be found than the history of the successful struggle of the Irish medical profession over the certification question. The Irish Medical Committee, supported loyally and generously by both the Irish Medical Association and the British Medical Association, and by the great body of the rank and file of the profession, succeeded in overcoming a seemingly invincible opposition — society "bosses," political powers, official hostility, and, worse than all, the traitorous attacks of a small—fortunately a very small—clique within the profession. From the victory of the Irish Medical Committee, the Irish medical profession can learn many lessons. There are, as Dr. Blake pointed out, many questions pending which will require all the strength and all the brains of the profession to meet. Poor Law Reform is long overdue—it is certain to be one of the first problems to be tackled by an Irish legislature, in whatever form that legislature may be embodied. The medical profession of Ireland must remember—when that question rises—that it is only by union it can maintain its interests intact and can make its demands effective.

Post-Graduate Work

IMMERSION in clinical practice, with practical cessation of opportunities for study, is the common fate of most medical men. It is urged that such a system is mistaken, inasmuch as it fails to keep one abreast of modern research, and of its applied results. Thus, under existing circumstances, a practitioner employs the standard of knowledge, and degree of *technique* existing at the time of his qualification, plus a modern smattering picked up at academic meetings, or gleaned from chance perusals of transactions. In the British Navy, impressed by the situation, it has been made compulsory for surgeons to present themselves for a series of examinations in their post-graduate career, with the object of preventing professional stagnation and rust. As an alternative, in civilian work, it is *optional* for a conscientious practitioner to study for certain further higher qualifications, but such a casual system hardly meets the case under consideration. It might be possible to introduce some compulsory element, necessitating attendance periodically at a well recognised medical centre, for purposes of a return to student methods. Compulsion has an ugly sound for many. Yet such an arrangement might conduce to an increase in general efficiency, and, moreover, would save the elderly from their great handicap, namely, unequal competition with their more recently qualified juniors.

Books as Germ-Carriers.

VERY numerous are the cases of contagious disease attributed to the reading of infected books, for books are to the lay mind such obvious germ-carriers. A child suffering from diphtheria breathes upon the pages of a book which presently is borrowed by another child—naturally the second child acquires diphtheria too. Dr. Laubach considers the investigation of this matter of some importance, and in the current number of the *Bulletin of the Johns Hopkins Hospital* he has published the results of some interesting experiments dealing with the subject. In one set of experiments cultures were made from books obtained from a public library chiefly used by poor children. In no instance were definite pathogenic bacteria discovered either by cultivation or by inoculation into animals, although in two instances *B. coli* was found. Then search was made for *B. diphtheriæ* in books known to have been handled by children suffering from the disease. In every instance the search failed. The findings were also uniformly negative as regards the tubercle bacillus. Finally, sterile books were deliberately smeared with cultures of virulent organisms, and then kept under various conditions in order that the influence of these conditions upon the life of the organisms might be determined. Those most favourable for survival of the organisms were found to be moisture, absence of daylight and room temperature. Under these circumstances *B. coli* could live for five or six months, while *B. diphtheriæ* was found of undiminished virulence after one or two months. Direct sunlight and diffuse daylight are the most efficient germicides, the former causing the life of the organism to be measured in hours. In conclusion, Dr. Laubach states that although there is thus no empirical reason for maintaining that books serve as vehicles for infection, yet the fact that pathogenic bacteria can be recovered from artificially infected books after long periods of time is sufficient reason for insisting upon the thorough disinfection of books which have been handled by infective patients.

Post Mortem Cæsarean Section.

THE obstetrician is from time to time severely oppressed by the dual responsibility. Occasionally this may be relieved by the intra-uterine death of the fœtus, but in cases where death overtakes the undelivered woman all his resource and skill will be required to save the life of the child. Dr. Lee states that the fœtus may live from 5 to 20 minutes after the mother's death, and immediate action is therefore necessary. Considerable strength of mind is needed, for the operator must be absolutely convinced of the mother's death within one or two minutes of its occurrence, so as to abandon all attempts at resuscitation and to open the abdomen without waiting for aseptic precautions in order to extract the child without delay. In the current number of the *American Journal of Obstetrics* Dr. James A. Harrar, of New York, reports the cases of *post mortem* Cæsarean Section. Of these, two children only lived to be discharged from hospital, three were stillborn, four failed to breathe, one died soon after delivery, and one died on the sixth day of pneumonia (one delivery was of twins). Dr. Harrar states that the child has a better chance if the mother's death has been sudden, as in apoplexy hæmorrhage, etc., while it will live for a shorter time *in utero* where death has been more gradual, as in tuberculosis, or heart disease. In this series of cases the longest interval between the death of the mother and the delivery of a living infant was 7 minutes. One child delivered 20 minutes after the mother's death had a feebly beating heart, but made no attempt at respiration. Hallman in 1914 collected 68 cases from recent literature with 61 to 68 per cent. of living children, but it is probable that very many unsuccessful cases have never been recorded, and hence these statistics cannot be regarded as of absolute value. The legal aspect of the procedure is discussed at length in

the same journal by Mr. G. W. Whiteside, counsel to the Medical Society of the County of New York. He holds that the operation is justifiable even without the husband's consent, and that the surgeon might incur criminal responsibility by neglecting to operate. On the other hand, the procedure might be regarded as an autopsy, and therefore illegal without consent. The early laws of the Romans decreed Cæsarean Section in pregnant women dying undelivered, but our present day system has omitted to make provision for such cases.

Conscientious Objectors and the Indian Civil Service.

The Government have accepted a proposal of the Secretary of State for India to render conscientious objectors to military service ineligible for the Indian Civil Service.

The rule declares the inadmissibility of any person "who has made before any tribunal established under the Military Service Acts, 1916, application for certificates of exemption from the provisions of those Acts on the ground that he has conscientious objection to the undertaking of combatant service."

Under the Act of 1858 the Service has to be recruited exclusively by open competitive examination of British subjects; but an emergency Act passed last year provided that this requirement need not apply to more than one-fourth of persons admitted to the Service during the war and for a period of two years thereafter. The Secretary of State was given power to fill the remaining vacancies by nomination, and the rules will provide that in the case of European, as distinct from Indian, candidates, service with the armed forces of the Crown of a certain length and nature must be a condition of selection. As the rule takes immediate effect it will apply to the examination commencing on August 1st, for which six vacancies only were notified. The mere application for a certificate disqualifies, and in the event of refusal to grant it by a tribunal, subsequent war service, whether in a combatant or non-combatant capacity, will not remove the bar.

We cordially approve of Mr. Chamberlain's recommendation, though we confess to a feeling of pleasant surprise at its adoption by the Government, which has hitherto treated the conscientious objector with a tenderness almost morbid in its intensity. The step is an act of justice to the patriotic youth of our country. In peace time hundreds of public school and university students aspire to the Indian Civil Service, and enter it after strenuous study and stiff competitive examination. The war records of our schools and universities show what these youths have done. They have risked their careers and set aside their ambitions—in many cases have given their lives—to serve their King and country by defending the rights and liberties of the Empire.

The conscientious objector sits safe at home with a whole skin through the heroism of his betters. We have heard a lot recently about "job-snatching." We are glad the Secretary for India means to see that the pampering of the C.O. is to have no recognition in his department. The mind of the conscientious objector is not the type we wish for in the rulers of our great dependency.

Captain D. A. Ross Haddon, R.A.M.C., attached Royal Scots, has been wounded for the second time. A native of Hawick and educated at Fettes College, he graduated M.B., Ch.B. at Edinburgh in 1913. He first saw service with the 10th Royal Scots, and after recovering from wounds he was transferred to the R.A.M.C.

PERSONAL.

Mr. J. M. Palmer, F.R.C.S.I., has been appointed a Deputy Lieutenant for the County of Armagh.

Sir Alfred Pearce Gould has been elected Vice-Chancellor of the University of London for a second term of Office—namely, until June, 1917.

Dr. James Burnet, M.A., M.D., M.R.C.P.E., has been appointed Medical Adviser to the Local and General Munitions Tribunals for the Edinburgh district.

Dr. R. A. Fleming has been appointed on the staff of the King's Body Guard for Scotland (Royal Company of Archers), in place of the late Dr. W. Allan Jamieson.

By a decree of the Board and Visitors of Trinity College, Dublin, Sir Robert Henry Woods, M.D., M.C., has been appointed Honorary Professor of Laryngology and Otology.

Capt. A. D. Stirling, R.A.M.C., who has been mentioned in dispatches, graduated M.B., Ch.B., with distinction, at St. Andrews University in 1907. His name also appeared a year ago in Sir John French's dispatch.

Sir Alfred Keogh, Director-General of Army Medical Services, has been elected an honorary freeman of the Society of Apothecaries of London, "in recognition of his peculiar services to the State and the medical profession."

Capt. Alexander Findlater, R.A.M.C., Medical Officer at Hendon Union Infirmary, of North Lodge, Edgware, has been presented by residents of Edgware, Stanmore and district, with an illuminated address, an album, and a cheque for £150, "on account," in recognition of his winning the D.S.O.

Dr. A. E. Larking has been appointed a magistrate for the borough of Buckingham. Dr. Larking is an old Volunteer officer, having been Surgeon-Captain of the East Kent Regiment. He started the Buckingham Division of the St. John Ambulance Brigade, which has done valuable V.A.D. work since the war, and recently formed a new nursing division, which comprises 20 members. He has held a seat on the Town Council.

Capt. A. S. Glynn, R.A.M.C., who has been mentioned in dispatches for the second time, is a well-known Watsonian, and was formerly a member of the famous Watsonian Rugby team. He is a well-known Edinburgh doctor, and has been in Flanders since the early days of the war. Since November, 1914, he has been serving in the trenches with the Northumberland Fusiliers. Capt. Glynn is a graduate of Edinburgh University.

The Sisters at the West Ham Hospital are to be paid £3 a year as a war bonus, and the nurses £2 a year.

Dr. A. D. Woolf, M.D., 13, The Avenue, Highams Park, has been appointed Divisional Surgeon in the St. John Ambulance Brigade.

The Frank Smart Prizes at Cambridge have been awarded to Mr. C. P. Dutt, B.A., Queens' (Botany), and Mr. M. A. Husain, B.A., Christ's (Zoology).

Mrs. Sarah Halsted Sandford, of Sandford, Salop, left £1,000 each to the Whitchurch Infirmary, and the Alexandra Hospital, Rhyl; £10 each to the Salop Infirmary, and the Salop Eye and Ear Infirmary.

THE CHADWICK TRUST LECTURES.

LECTURE II.—FRIGORISM.

By PROF. SHERIDAN DELÉPINE, M.B., C.M., M.Sc.,

Director of the Public Health Laboratory, University of Manchester.

Frost-bite as it Occurs at High Altitudes and in Arctic Regions.

My experience of frost-bite has been gained among the snows and glaciers of Swiss mountains, and as far as I am personally concerned it has fortunately been limited to frost-bites of the first degree. I have also seen the terrible effects of more severe frost-bites in Bourbaki's army when it took refuge on Swiss soil during the severe 1870-71 winter. The accounts which I have read of the effects of exposure to cold in Arctic regions seem to indicate that the characters and mode of occurrence of frost-bite in these regions are very much the same as in our part of the world, but that owing to the intensity of the cold, their frequency and the rapidity of their onset are very much greater.

It is a matter of common experience among Alpinists that it is possible, when the weather is fine, to walk for hours over hard frozen ground, snow or ice, without experiencing any discomfort, even when the thermometer indicates temperatures 10° to 25° below 0° C., and the air is so cold that the moisture of the breath freezes hard as soon as it condenses on the moustache or on adjoining garments. At such times the skin of the face feels stiff and tingles as if exposed to a hot fire, the tips of the nose, ears, or fingers may ache more or less. From time to time one discovers on touching one's ears or nose that these parts are deprived of sensation. When this is noticed in time the circulation is generally rapidly restored if one rubs the frost-bitten organs with soft, dry snow. The parts so affected are generally pale and somewhat bluish, they may look shrunken, they certainly are not swollen or deeply coloured. When the process extends to the whole body, as when a fatal sleep supervenes under the influence of cold and fatigue, the various parts of the body retain their normal appearance, except as regards colour. As circulation returns, under the influence of friction or movement, a frost-bitten region becomes red and has a tendency to swell; at the same time it becomes the seat of painful burning and tingling sensations. This type of frost-bite is said by surgical writers to be of the first degree.

When a part has remained frozen so long that circulation cannot be re-established, death of the affected tissues takes place, and the adjoining regions become inflamed. The dead parts in such cases generally dry up (dry gangrene). If imperfect circulation is re-established through the damaged tissue, the frost-bitten organ may become the seat of serious inflammatory changes, and may die slowly, passing into a state of moist gangrene.

Death of the tissues may therefore result from the action of cold, in which case there is no inflammatory lesion, or it may be partly due to the action of cold and, to a greater or less extent, to the disturbances of circulation and the inflammation following partial recovery from frost-bite.

Exposure of unprotected parts of the body to the intense cold which at times prevails in Arctic regions is followed almost instantly by frost-bite, more especially when there is much wind and after sunset.

The following passages taken from the account of Antarctic adventure, published two years ago by Mr. Raymond E. Priestley, are sufficient to indicate the conditions favouring the occurrence of frost-bite in Antarctic regions:—

"The gale commenced actually while Campbell was taking the observations, and his fingers were so benumbed that he was unlucky enough to break the maximum thermometer. He had not been prepared for wind, and had gone out without his wind-proof helmet or any fur mitts, and so his nose and fingers were badly frost-bitten, and he did not know exactly what he was doing with the instruments." (p. 104.)

"The temperature during this journey had been decidedly lower than during the last, and on the morning of the 13th we registered our lowest temperature for the year, — 42.8° F.. and there was on this day a fair crop of frost-bitten faces, fingers, and feet." (p. 158.)

"The temperature had so far remained obstinately below zero, ranging between —20° F. and —28° F., but the weather was beautifully clear and the cold, combined with bright sun, was really no hardship. It was not until the evening, when the sun dipped behind the Admiralty Range, that frost-bites became at all common." (p. 167.)

"May was ushered in quite appropriately with a blighting westerly wind. The sea ice which had formed again on the bay during the last day or two of April was driven out to the horizon, and several members of the party who were working outside sustained severe frost-bites. Browning in particular returned to the cave with his whole hand and wrist quite dead and white, and he was some time restoring its circulation." (p. 265.)

"July 21st was marked by what was perhaps the coldest wind yet. I don't know how many degrees of frost there were, but I felt as if I had no underclothes on at all, and in three minutes I had three body frost-bites, and hurried back as fast as I could against the wind in time to stop the others going down." (p. 319.)

"I put in a couple of hours mending one pair of my wind-proof trousers, and Browning put in the same time on my working pair, which were rotten with blubber." (p. 320.)

When the cold is not excessive and the air is dry, ordinary walking boots with thick woollen stockings are quite sufficient protection for the feet if the rest of the body is warmly clad. In ordinary winter clothes I have often walked for eight or ten hours in dry snow at high altitudes in the Swiss mountains when the temperature of the air ranged between — 10° and — 20° C. without any other inconvenience than that caused by the necessity of rubbing occasionally my nose and ears with snow when loss of sensation indicated the possibility of frost-bite.

Once when the temperature was at least 10° below 0° C., I fell through a hole in the ice and was momentarily immersed nearly up to the waist in water. After taking some violent exercise, during which the outer parts of my garments froze hard,

the sensation of wetness and coldness disappeared rapidly, and I was able to walk several miles without other discomfort than that caused by the stiffness of part of my outer garments. The weather was very fine, and the air, though cold, was dry and still.

Coming from higher regions where air and snow are dry, to lowlands where thaw has set in, it may become necessary to wade through half-melted snow or pools of snow-water; when this happens a sensation of extreme cold is rapidly experienced, even when the temperature of the air is several degrees above the freezing point. Under these circumstances the feet are liable to get wet, and when this occurs they often suffer more than other parts of the body.

Insufficiency or unsuitability of food and clothing, constriction of extremities, inactivity, illness, excessive fatigue, previous occurrence of frost-bite, are all very important well-known predisposing factors which I need not discuss at this stage.

"TRENCH-FOOT"—SOME EXPERIENCES OF THE ARMY IN FRANCE DURING THE WINTER 1914-15.

During the winter 1914-15, a large number of soldiers in the north of France suffered from exposure to wet cold in the trenches, and this resulted in lesions which have variously been termed frost-bite, water-bite, chilled-foot, boot-bite. Notwithstanding the improvement which has taken place since then, a number of men were invalidated last winter owing to the same cause. Mr. Tennant (*a*), in the House of Commons on December 8th, 1915, stated that during the week ending November 27th there were approximately 770 cases of trench-foot reported from France. Captain Page (*b*), after examining 332 cases, classified as frost-bite, *soon after they had been disabled*, found that a large percentage of cases resulted from exposure to wet when the temperature was above freezing point. He estimated that only 10 per cent. of the men had suffered from the effects of actual frost. There was a regular history of exposure in wet trenches from 24 to 72 hours. Cases which had been exposed to frost after wet had, as a rule, been the most severe. He describes three types of frost-bite, the first two of which correspond to the first degree of older writers.

Several other observers have published valuable contributions upon the subject of trench-foot. For the present purpose I will only refer to the information supplied in two or three contributions regarding the circumstances under which trench-foot occurred.

Major Miller had the opportunity of examining (after their return to England) 376 soldiers invalided on account of trench-foot. The history which he obtained from 100 of these examined consecutively established the fact that every one of these men had been standing in mud and water to a depth of between 18 inches and three feet for many hours, and that they had been wearing short boots with more than one pair of socks, and the majority also wore putties. Sixty-five of these men said they had been exposed to freezing temperature.

Lorrain-Smith, James Ritchie and James Dawson, who examined 51 cases of frost-bite after their return to England, found that all these patients, except one, had been fighting in trenches. Except in two cases, the trenches had been wet, and very frequently on their way to them the men had been obliged to wade through mud, sometimes up to the waist. The muddy water was not usually frozen, although sometimes in the morning there would be crystals of ice on it. In only one case was there frost-bite of the hands.

(*a*) *Lancet* (December), 1915, II., p. 1379.
(*b*) *Lancet* (March), 1915, I., p. 590.

The total number of cases referred to in these communications amounts to over 750, and from the statements made by the writers one may infer that more than 70 per cent. of the men suffering from trench-foot had not been exposed to freezing temperatures.

Most observers agree that, generally speaking, the men affected with trench-foot were well clad and fed, but that a certain proportion of them had suffered from nervous strain and forced inactivity.

The conditions of trench warfare had made it necessary for the men to remain for many hours consecutively almost motionless and in cramped positions, while their feet or legs were frequently immersed in water or watery mud at a temperature generally above the freezing point. This was not the result of carelessness or ignorance, for these men must have experienced intense, and at times almost intolerable, discomfort, and they had also been warned of their danger by one of the Army Routine Orders, dated November 23rd, 1914 (issued therefore at the beginning of the first winter).

The facts which have been referred to show that cold may cause serious lesions even when the temperature is still distinctly above freezing point.

This was obviously the case with regard to most of the soldiers who suffered from what has been called "frost-bite." It is, however, very doubtful whether the lesions from which these men were suffering had in their initial stage the same characters as those which are produced under the influence of great cold, and to which the name of frost-bite has very properly been given. That exposure to wet cold may lead ultimately to inflammation and gangrene does not prove that there are no differences in the mode of production of the original lesions.

EFFECTS OF EXPOSURE TO COLD—FRIGORISM.

Exposure to cold may have a stimulating effect beneficial to the activity of the tissues, and result in an increased production of heat, but when the amount of heat produced in the body is insufficient to compensate for the loss taking place on its surface, cooling occurs more or less rapidly. The parts most affected are those which are most exposed and in which the circulation of the blood is less active. It may also happen that owing to pressure, inactivity of muscles, or other reasons, the flow of blood through a part is so reduced that the amount of heat conveyed to the part is insufficient to compensate for the losses; this may occur even though heat production in the rest of the body is quite normal.

When general or local cooling reaches a certain degree, the functions of the tissues are interfered with, and the amount of damage done is determined by the degree and the duration of the cooling. Cold alone may, if sufficiently prolonged, cause death. It must, however, be always remembered that many of the lesions which are attributable to cold are due to the reaction which takes place after cold has ceased to act, and when blood circulates again more or less freely through damaged tissues.

It is convenient to group under the term "frigorism" the various morbid states which are attributable to the action of cold on living tissues.

Frigorism may be general or local. *This state is produced when cooling of the body or part of it is progressive.* It may be produced slowly by exposed to temperatures above the freezing point but many degrees below the normal temperature of the body, as frequently occurs in wet trenches. It may be produced rapidly by exposure to severe cold, as is the case in Arctic regions.

In the former case the parts are never frozen, and the damage to the tissues is produced gradually. In the latter case the frost-bitten parts are liable to

actual freezing, and death of the tissues may occur rapidly.

Many cases of "trench-foot" are good instances of *frigorism without frost-bite*; on the other hand, the form of frigorism usually observed in the Arctic regions is *frigorism with frost-bite*. These distinctions are not without their importance. They indicate both the resemblances and the differences between the effects of exposure to various degrees of cold.

There remains now to explain why soldiers exposed in trenches to a moderate amount of cold suffered more than Arctic explorers exposed to very much more intense cold, and why trench frigorism affected almost invariably the feet and legs and very seldom the hands and face, while the reverse is true of frost-bites due to much more severe cold.

The difference may be explained on general grounds if one takes account of all the circumstances.

When a body is surrounded by a medium at a lower temperature than itself, heat passes from that body into the medium until the temperature of both is the same. The rapidity of this exchange is determined by many well-known factors. The loss of heat from any part of the body of an animal is governed mostly by the following conditions:—

(1) The temperature, the thermo-conductivity, the volume and the movements of the external medium.

(2) The duration of the exposure.

(3) The bulk, movements, and superficial area of the part exposed.

(4) The thermo-conductivity of the tissues, and more particularly of the integuments.

(5) The amount and velocity of the flow of blood through the part.

(6) The state of nutrition, activity and soundness of the tissues locally and generally (the kind and amount of food available being included under nutrition).

In a recent letter (*a*), Sir William Osler has insisted upon the importance of the venous stasis resulting from inertia of the leg muscles. Free circulation of the blood in parts exposed to cold is the natural and automatic method of compensation against the loss of heat due to exposure to cold, and muscular activity, provided it is not excessive, promotes good circulation. I must, however, point out that, even when the circulation is normal, if the amount of heat absorbed by surrounding media is in excess of the maximum amount of heat which can be supplied by the blood, then cooling of the part invariably takes place. Thus, a strong swimmer often succumbs to the effects of immersion in cold water long before his muscular power is exhausted. Persons shipwrecked in cold water are more rapidly affected by cold than by their exertions.

Stripping of the body, as commonly practised in such cases, facilitates swimming, but also favours rapid cooling, and is probably more detrimental than useful when the water is cold.

In some Alpine lakes there are zones or areas where, even on the hottest days of summer, the water remains very cold. This is due to springs or currents of water coming more or less directly from the glaciers. When a swimmer passes from the surrounding warmer water (where the body loses no more heat than is quite comfortable) into these cold areas he is rapidly numbed and liable to fatal cramps.

EXPERIMENTAL STUDY OF FRIGORISM.

The share taken by the external media in the rate of cooling of the body or of its parts can be demonstrated and estimated by means of comparatively simply experiments. Several of these have been described in previous communications, in which details of the methods used have also been given. These experiments may be summed up as follows:—

The subject used in most of these experiments was a healthy person no longer young, but well fed and with good circulation. The heat production was not above normal. In some sets of experiments tests were applied simultaneously either to the two feet or to the two hands; in other sets the tests were applied in rapid succession to the same parts of the body, so that there was no appreciable difference in the production of body heat. Control experiments carried out singly at intervals gave the same results as the simultaneous or consecutive ones.

(*a*) When the bare hand and arm were exposed to dry, still air at + 10° C., a not unpleasant sensation of coolness was experienced, but if they were plunged in water at + 10° C. the skin was rapidly chilled, and after a few minutes felt very cold and uncomfortable.

(*b*) When the hands and feet were exposed to dry, still, cold air at 1° or 2° below freezing point, for ten minutes they felt cool but not uncomfortable, and the temperature of the skin fell slightly, but afterwards remained constant and not much below normal. When the hands and feet were afterwards plunged in water at the same temperature, a sensation of intense cold was immediately experienced, and the temperature of the skin fell rapidly much below the normal and continued to fall until it approached that of the water. In less than half a minute the sense of touch was almost entirely lost, the part was numb and the seat of unpleasant tingling sensations. Within one minute the hand and foot became painful. Before the end of another minute movements of the fingers and toes were frequently accompanied by cramps. When this occurred, the indicated temperature of the skin, which originally was about 30° C., had generally fallen to 10° C., or even less. At the end of three minutes movements had generally become distinctly difficult and painful, and the temperature had fallen to about 7° C. After a further interval of three or four minutes the temperature had fallen to 1° or 2° C., the part exposed felt like a weight hanging to the arm or leg, sensation being lost, and voluntary movements of the toes and fingers quite impossible. Thus, in about seven minutes the parts immersed in water at a temperature near the freezing point had passed into a state undistinguishable from what has been described as frost-bite of the first degree.

From this state, after being well dried and rubbed, the hand and foot recovered rapidly, and became the seat of the painful sensations and congestion such as are also observed in parts recovering from ordinary frost-bite. It will be noticed that in these experiments there was a progressive loss of heat, and that the temperature of the skin fell gradually till it approached very nearly that of the external medium. This was apparently due to the fact that more heat passed from the immersed hand or foot into the surrounding water than could be brought to the parts by the circulating blood. This was made clear by the following experiment:—

(*c*) Instead of being plunged into a large amount of cold water, the hand was plunged into double its volume of water at freezing temperature. The first effects were exactly the same as those previously recorded, but the cooling of the hand was slower, and reached its maximum in about twelve minutes. The symptoms of frigorism also reached their maximum at the same time. After this the temperature of the hand rose again until at the end of

(*a*) *Lancet*, December, 1915, II., p. 1368.

half an hour it was 12.5° C., and by that time nearly all symptoms of frigorism had disappeared.

While the temperature of the hand was falling that of the water was rising, and twenty minutes after the beginning of the experiment it had risen to nearly the same point as that to which the hand had fallen, after which there was a parallel rise of temperature, both in the hand and in the water. Almost immediately after the progressive cooling of the hand had ceased, the symptoms of frigorism began to abate.

(*d*) When, before being plunged into cold water, the hand and foot were covered with a thick woollen glove or sock, cooling took place much more slowly than when these parts were entirely unprotected; this was specially the case when the immersed parts and the water were still. This was undoubtedly due to the fact that the water imprisoned in the meshes of the woollen fabric, after it had been warmed by the hand, could not diffuse so readily into the surrounding cold water as when the skin was bare. This to a certain extent limited the amount of cold water having access to the skin, and brought about conditions not unlike those of experiment (*c*). This experiment is in accord with what has already been said regarding the disadvantages of stripping after shipwreck.

These experiments, selected from amongst a much greater number, show that the differences in the effects of exposure to cold dry air or to cold water are due to the fact that water conducts heat much better than air. While the amount of heat lost by a part exposed to still air at freezing temperature can be rapidly compensated for by the amount brought to the part by the circulating blood, the reverse is the case when the part is immersed in cold water. The effect of this difference is that the cooling due to cold, still water at 0° C. is progressive, while that due to cold, still air at 0° C. is not.

Prevention of Frost-bite.

The facts which I have brought forward indicate clearly how the forms of frigorism which have been popularly termed "trench-foot" can be guarded against, but before discussing the special method which I have recommended for preventive purposes. I wish to make it clear that it is intended only to meet those special circumstances prevailing in the trenches under which the usual methods become insufficient.

Some writers have assumed that choice was generally possible, for they have suggested that trench-foot might be prevented by shortening the duration of the periods spent in the trenches, by taking more frequent muscular exercise, by keeping the trenches dry, etc., etc.

All these are no doubt counsels of perfection which must always be before the mind of responsible officers; as a matter of fact, the Army Order issued at the beginning of the first winter clearly shows that the superior command had not neglected to instruct the Army regarding the importance of these points.

I think, therefore, that it is safe to assume that men who endured what they had to endure in wet trenches during the last two winters did not do so as a matter of choice, but under the stress of necessity. We have, therefore, to face the following question :—

What is the best way to prevent the occurrence of frigorism *when men are in the necessity of spending many consecutive hours in a state of muscular inactivity, and with their feet plunged in cold water or mud?*

When the feet and legs, protected by waterproof waders, are plunged into cold water, a layer of air is imprisoned between the skin and the inner surface of the wader, and it is this layer of air which prevents rapid loss of heat. The thickness and the composition of the waterproof covering are comparatively of little importance. This can be proved by the following simple experiment :—

The dry foot and leg are covered, first, with a dry, thick, loosely-knitted, woollen stocking, and outside this by a waterproof covering made of thin oil-silk, and then immersed in ice-cold water, or in a refrigerating mixture at a temperature a few degrees below freezing point.

Instead of the parts so immersed being painfully affected in a few minutes by cold, as has been shown to occur when the skin is unprotected, they remain for several hours warm enough to discharge their functions, and no evidence of frigorism is observed. The indicated temperature of the skin, instead of falling rapidly towards that of the water, is only slightly reduced, and remains stationary. When the air imprisoned in the wader becomes moist, a slow fall of temperature is observed.

That the protection afforded by the waterproof wader is not due to the nature of the material of which it is made can be proved by pouring some warm water between the skin and the wader. When the air in the space between the wader and the skin is replaced by water, marked and progressive cooling of the skin takes place very rapidly, though not so rapidly as when the water next to the skin is not rendered stationary.

Many experiments of this kind convinced me that when immersion of the legs and feet in cold water or mud becomes a matter of necessity, the best protection again frigorism ("trench-foot" so-called) is provided by good waterproof waders.

My experiments have, in addition, led me to recommend oil-silk waders as having distinct advantages over heavier waders. In order to obtain good oil-silk bags it is necessary to avoid sewn seams, and to have resort to apposition seams. These are made readily enough by careful workmen, but up to lately manufacturers who have attempted the production of these bags have succeeded only in making 70 good bags out of every 100. With proper care one should be able to obtain constantly good results.

Manufacturers of india-rubber goods have been more successful, and so far the method which I have recommended has been carried out chiefly by means of india-rubber waders. Many imperfect waders have, however, been used, and failures due to this must not be accepted as evidence against the method.

The bags I used for the purpose of the practical tests, conducted during the early months of last year, extended up to the knee, and could be worn for twelve or fifteen hours at a time without discomfort, and without undue condensation of perspiration. When in later experiments, bags reaching up to the hip were used, it was found, especially after a march, that abundant condensation of perspiration took place on the inner surface of the bag. This led to an accumulation of water round the foot and reduced to a considerable extent the protection afforded by the bags.

It is obvious that if the use of long bags is essential, these bags should not be worn during long marches, or, if they must be worn, their length should be reduced by suitable folding during the march.

I do not think, however, that waders of any kind are suitable for wear during long marches. What is important is that the men wearing them in the trenches should be able to leave the trenches and march or run without the waders interfering with the freedom of their movements. One of the

essentials of success is that the foot and leg should be left entirely free from any pressure causing a sensation of constriction, or tightness, or interfering with the freedom of circulation. The foot should be dry and warm when the wader is put on.

Large boots and socks are indispensable; the inner woollen sock should be thick, the outer sock should be large enough to draw easily over the oil-silk bag. It should not be made of material liable to shrink when wet. In my first tests both the inner and the outer socks were woollen. (See *British Medical Journal*, II., December 18th, 1915, for mode of wear and care of waders.)

ORIGINAL PAPERS.

A NEW AND SIMPLE TEST FOR SYPHILIS.

By J. E. R. McDONAGH, F.R.C.S.,
Surgeon, London Lock Hospital.

DURING the years 1913-14 I undertook a series of experiments with the view of discovering the rationale of the Wassermann reaction (1), since I thought it rather unscientific to interpret the results, as we did, of a reaction about which we know nothing. The result of the work was to show that the Wassermann reaction was a purely physical reaction, depending upon the size and number of the protein particles in syphilitic sera. From an ultra-microscopic examination of a number of sera it was evident that syphilitic sera contained not only more protein particles than normal sera, but also they were much bigger. Seeing that the colloidal particles were bigger and more numerous in the case of syphilis, I then conducted another series of experiments and found that syphilitic sera contained more protein nitrogen, more adsorbed amino-groups, and more adsorbed electrolytes than normal sera. The last point was also proved indirectly by comparing the clotting time of the various sera (2). It became clear, then, that the colloidal particles were protein or, more strictly speaking, lipoid-protein, as proved by my micro-chemical work (3) upon plasma cells and the phases of the Leucocyto-zoon syphilidis. These lipoid-protein particles, as they exist in the serum in which they form the protective substance (or antibody, as it is often called), are perfect emulsoids—*i.e.*, their molecules contain water and they are partly in "solution." Being in solution, the particles are invisible to the naked eye, but if they are robbed of the salts attached to them they become visible as a precipitate, in which form they are known as suspensoids.

Now, it occurred to me that it ought to be possible to devise a simple test which would render such particles visible, the degree of precipitate formed and the rapidity with which it formed varying according to the number of particles in "solution" in a given serum.

For this purpose I used glacial acetic acid and then an electrolyte. I was originally under the impression that the change which occurred was a colloidal transformation of emulsoid to suspensoid (4). When I found later that the transformation was reversible and that the precipitate was soluble in water I came to the conclusion that the change which occurred was more probably a transformation of emulsoid to gelation. The "emulsoid-gelatine" or "Gel" test is therefore a better name than my original one of emulsoid-suspensoid, or E.-S. test, and that is how I shall in future refer to it.

From 5-20 cc. of blood are taken from the vein and the blood is allowed to clot in order to allow the serum to separate out. It is better not to use a centrifuge. Also, the serum should not be incubated. An opaque serum or one tinged with hæmoglobin may be used. The serum should not be more than a few days old. In order to carry out the test satisfactorily it is necessary to have both a negative and a positive control—*i.e.*, a known non-syphilitic and a known syphilitic serum, because the time of year and the temperature of the room have an influence upon the reading of the results.

Two cc. of glacial acetic acid are now placed in a dry and clean test tube, to which is added 0.5 cc. of the serum to be tested. The tube is then shaken.

For every serum to be tested four dry and clean test tubes are taken—*i.e.*, if there are six sera including the two controls, a rack holding 24 tubes will be required.

One cc. of glacial acetic acid is first added to each tube, then into A tube 2 drops of the acid serum are placed, into B, 4 drops; into C, 6 drops; and into D 8 drops. The drops should be as small as possible, therefore a pipette is made out of narrow-bore glass tubing, tapering finely at the end. Needless to say the same pipette must be used for each series of tests, since the results obtained vary with the size of drop used. After the serum has been added and the tubes shaken, 0.2 cc. of a saturated solution of lanthanum sulphate in glacial acetic acid is added to each, and the tubes are again shaken. The tubes are then left undisturbed and the changes noted. In the positive control a precipitate soon forms in D, then in C, A and B, or C, B and A. Half an hour or so later the precipitate has fallen in all four tubes, leaving a clear solution above in tubes A and D. Later still the solution becomes clear in the other two tubes.

In the negative control the precipitate forms slowly, but in time it appears in all the tubes, but the solution above does not become absolutely clear in all four tubes even if left over till the next day; therefore it is the easiest thing possible, not only to differentiate a syphilitic from a non-syphilitic serum, but also to tell the grades of positivity and thereby gauge accurately the effect of treatment. I have tried this test on over 250 sera, controlling the first 200 by the Wassermann reaction, with the result that I am more than satisfied with it and consider the latter superfluous. In the 200 sera one gave a strong positive and two a slight positive Wassermann reaction, although the patient had never had syphilis so far as I could tell. By my test these three sera were negative. Out of these 200 cases 37 gave a negative Wassermann reaction, when the test should have been positive. By my test all these sera were positive.

The increase in the number and size of the lipoid-globulin particles—*i.e.*, in cases of primary syphilis, can be detected by this new method more rapidly than by the Wassermann reaction. In the generalisation stage of syphilis a serum in which the particles are very fully laden with electrolytes may give a negative Wassermann reaction, while in the recurrent and late stages a negative Wassermann reaction is frequently obtained owing to the influence fatty acids have upon surface tension, and finally normal sera in which the protein particles have been rendered partly suspensoid, will always give a positive Wassermann reaction. These are disadvantages which can never be foreseen by the observer, and none of them influence the "Gel" test sufficiently to lead to a false reading being made.

To obtain uniform results it is advisable to test all sera drawn off on a certain day at the same time. The acid serum should also be freshly prepared, though those prepared a day or two before-

hand can be used, provided fresher sera are not included in the same series.

Instead of lanthanum sulphate, either a saturated solution of thorium sulphate or nitrate in glacial acetic acid may be used. The precipitate is formed most rapidly with thorium sulphate, then with thorium nitrate, and finally with lanthanum sulphate. According to the Hofmeister series the precipitating power of the sulphate anion in an acid medium is greater than that of the nitrate anion, but the precipitating power of thorium nitrate is greater than that of lanthanum sulphate, for the probable reason that the atomic weight of thorium is greater than that of lanthanum.

If the precipitate forms too quickly or the observer is called away before he has read his tests, all that is necessary is to add one cc. of water to each tube and to shake them on his return. The precipitate then partly goes back into "solution," but more completely in the case of a negative serum than in the case of a positive serum; therefore a syphilitic serum can be differentiated from a normal serum by the greater degree of gradient opacity in the four tubes of the former. The difference is particularly clear when thorium nitrate is used.

If 0.2 cc. of the electrolyte originally used be now added, down comes the precipitate again, in the positive tubes (syphilitic), quickly; in the negative tubes (non-syphilitic), slowly. The difference between a syphilitic and normal serum can in this way be best judged when thorium sulphate is used. With thorium nitrate, and still more so with lanthanum sulphate, the secondary precipitation occurs very slowly. This re-precipitation can even be repeated more than once, especially with thorium sulphate, but on the third occasion it takes some hours to form.

For some years now I have maintained that a positive Wassermann reaction is neither necessarily indicative of active syphilis nor a certain indication for further treatment (5). My view is that a positive reaction means that presumably the patient has had syphilis, and no more. As to whether my test is going to tell us more than this I cannot say, but my feeling is that it will not. I much doubt whether a bio-chemical test will ever be devised which will remove a clinical opinion from the premier position which it has hitherto held in medicine. The more I learn in medicine the more confident am I of the fact that the best diagnosis is the clinical one.

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INTRAVENOUS SEROBACTERIN THERAPEUTICS: A PRELIMINARY REPORT.*

BY WILLIAM EGBERT ROBERTSON, M.D.,
Philadelphia.

BACTERIN treatment is an outgrowth of studies in immunity and should therefore be approached from that angle. It is not necessary, however, to review *in extenso* the subject of immunity, in a general way, well understood by all practising physicians who make any pretence at an effort to keep abreast of the times in medicine. It will suffice to outline in a sketchy way the chief features.

Immunity from certain infectious diseases in those who have already suffered an attack has been known for nearly 3,000 years. For instance, Thucydides, who was born about 471 B.C., noted immunity in relation to the plague at Athens. Practical use of this fact seems to have been made use of first by the Chinese, who are said to have inoculated against smallpox by placing in the noses of healthy individuals crusts taken from those with active smallpox. In Europe it seems to have been recommended first by Lady Mary Wortley Montagu, wife of the British Ambassador to the Court of Turkey, who submitted her daughters to inoculation. She it was who said that the natives of the Orient submitted as readily to inoculation as the British did to the Bath waters. Of course, the dangers of this plan were the occasional severe and even fatal form of the malady in those inoculated and the ever-present danger of such individuals as foci of infection to others. Thus it soon fell into disrepute in more enlightened countries, and in the eighteenth century was contravened by law in the early American colonies. Jenner's work, and nearly a century later that of Pasteur, are the essential bases upon which our present superstructure has been reared; notably on the work of Pasteur, who appreciated the importance both of attenuation and passage through more or less resistant animals, as factors in the production of immunity, and their application in a therapeutic sense. The shortening of the incubation period in experimental rabies enabled him successfully to combat the disease in man. This he first accomplished in 1885. Haffkine, in 1892, using attenuated cholera vibrios and injecting them parenterally, gave us a means of lessening the morbidity and mortality of cholera. Salmon and Smith, in 1886, were first to show that for the production of immunity, living micro-organisms were not necessary, but that equally good results followed when bacteria killed by heat were injected, or even the products of bacteria from which the organisms had been removed by filtration. Prophylaxis against infections by means of cultures killed by heat or antiseptics we owe to Kolle, who, in 1896, suggested the plan as preferable to Haffkine's attenuated culture. It was in 1896 also that Sir Almroth Wright introduced the method of employing killed typhoid organisms for the purpose of immunisation against typhoid fever, and, in 1898, Shiga used the same method with dysentery bacilli against bacillary dysentery.

Thus far all the measures cited were prophylactic; methods for active immunisation. The first attempt at specific therapy was that of Koch, in 1890, with his tuberculin. This was a failure, however, at least as originally employed, and, in 1897, he introduced, rather as an immunising agent, a suspension of finely ground bacilli. To Wright we owe the present use of bacterins. He originally suggested the employment of killed micro-organisms as a therapeutic measure, especially in chronic affections. This was in 1904. He further suggested the advisability of employing autogenous strains. With the exception of organisms producing soluble toxins, however, notably diphtheria and tetanus, all the others, in which the toxin is endogenous—an integral part of the cell—their employment therapeutically has been more or less a disappointment. Even when used for active immunisation, with the exception of typhoid, the results have been indifferent, as was the case with the work of Wright with the pneumococcus, in his attempts to protect against pneumonia among the natives in India. As a therapeutic measure, however, in certain conditions, a fair measure of unanimity has come to exist among the profession. This is by no means general, for it is quite possible to recognise two camps—viz., those who are willing to admit the possible value of bacterins in local and

* *New York Medical Journal*, April 22nd, 1916.

chronic infections, but cannot see the rationale of employing them in acute infections, which for the most part are septicæmias, and in which the host is already labouring against an accumulation of toxin. Let us consider this latter phase first.

What happens when an individual falls ill with an acute illness of germ origin? The micro-organism, acting as an antigen, provokes the formation of reactive substances called antibodies, and whenever recovery occurs, it is because these bodies exist in sufficient amount to absorb or neutralise the toxins. In some instances the infection is so overwhelming that reaction is paralysed, so to speak. The organisms multiply too rapidly, and pour out too large an amount of toxin to be successfully dealt with. The basic fact, however, is that the same organism which begets the infection brings about the cure when recovery occurs. As has been seen, all the early work in immunity, dating from the time of Jenner, had for its object the attenuation of the infective material and shortening of the period of incubation. We seem to have lost sight of these facts in large measure in our therapeutic applications. To be sure, when we kill the organisms, we more than attenuate them, but we cannot carry the analogy further by attempting to shorten an incubation period in one already actively infected. What we aim to do is to cause an outpouring of antibodies which will overwhelm the toxin But are we likely to do this when we inject bacterins subcutaneously? Apparently not, judging from the usual results in acute infectious diseases. Studies in anaphylaxis have shown the vastly greater susceptibility of an animal to intravenous injections than to those given subcutaneously or intramuscularly. This is true of all foreign proteins, and as bacteria are proteins and foreign, this is equally true of them. It seems possible that the variability of clinical results may be due to the fact that when we inject subcutaneously, or especially intramuscularly, prompt reactions and beneficent results follow only in cases in which by chance we happen to enter a vein.

Naturally, the ideal bacterin seems to be one robbed of its toxicogenic properties, but still retaining its antigenic properties. This has never been attained. In fact, as stated earlier, the same toxin which causes the infection, serves to awake in those who recover reactive substances which bring about the recovery. The sole question raised by dissenters is, Are we justified in acute infectious diseases in introducing in any manner into a host more of the same toxin from which he is already suffering the effects manifested by that particular disease entity? It must be borne in mind that immunity is probably brought about by absorption of the antibodies by the antigen, and when this is well balanced, the body cells are left free to produce antibodies in excess. The incubation period of a disease is one in which the foreign protein in the shape of the infecting organism is adapting itself to its environment, gradually awakening in the tissue cells that property of reaction, with the production of antibodies. This requires a variable period of time according to each particular disease. In acquired infectious diseases the living active agent multiplies more or less rapidly, and in proportion to the rapidity of increase, must require material for sustenance, and production and absorption of antibodies may suffer in consequence. In our therapeutic efforts in the use of bacterins, therefore, we should have in mind the elimination of the incubative stage of germs, obligatory in acquired disease, and by employing killed organisms we avoid the necessities and dangers of living micro-organisms, leaving them the function of absorption of antibodies, and the tissue cells freer to produce more.

To effect the first part of this last proposition—viz., to elide the incubation stage, thereby introducing organisms already in a state capable of reacting favourably and at once upon the defensive mechanism, we employ the so-called serobacterins. These are prepared by sensitising micro-organisms with serum from an animal which has been immunised against that particular germ. It must be apparent, therefore, that the generally accepted plan of injecting dead, non-sensitised germs beneath the skin or into the muscle, and even this latter is rarely done, must fall far short of the results attainable by employing serobacterins intravenously. Several years before I became familiar with Besredka's work on sensitised bacterins, the possible advantages of such a plan occurred to me, and I had my interns in the Episcopal Hospital prepare them for me. In other instances I employed an immune serum taken from a patient who had recovered, and injected it with an ordinary or non-sensitised bacterin. Despite the employment of large doses, the results were indifferent until I gave them intravenously. Two diseases were studied with special care from the laboratory standpoint—viz., typhoid fever and pneumonia. In these, as a rule, the blood picture is fairly definite. In typhoid there is a leucopenia with a diminution of polynuclear neutrophiles and a relative increase in lymphocytes, while in pneumonia there is a leucocytosis with an absolute increase in polynuclear neutrophiles. It seemed to me that these should become more pronounced after the use of bacterins. This is not the case, however, when ordinary, non-sensitised bacterins are given. When serobacterins are injected subcutaneously, however, in most instances the expected happens, but when they are given intravenously, the results are very striking and leave no room for doubt. Whether this is constant I am as yet unable to say, as my opportunities for observation have not been sufficiently numerous.

When I was in the habit of giving bacterins subcutaneously I never felt satisfied that any definite result followed, whatever the dose and whether sensitised or non-sensitised bacterins were employed. When I gave them deeply into the muscle, however, I would occasionally get a sharp reaction, but the inconsistency of this result seemed to indicate something peculiar to the individual. In the light of my intravenous work, however, I now believe that reactions were obtained only when by chance I penetrated a vessel. As an instance of the possibilities resulting from the deliberate introduction of sensitised bacterins into the circulation, I may cite a case of typhoid fever in a lad of fifteen years at about the end of the second week of a typical attack. Five hundred millions each of sensitised typhoid and paratyphoid organisms were introduced intravenously. In seven minutes he had a chill which lasted twenty-three minutes, after which his temperature rapidly rose to 106° F. Twenty-four hours later it registered between 99° and 100°, and on the following day was down to 97° to hover between 97° and 98° for approximately a week, when a relapse developed. After allowing the relapse to proceed for four days, during which time the spleen became materially enlarged, he again received an intravenous injection, only one-half the dose previously employed being given, again followed by a sharp reaction with chill, hyperpyrexia, and rapid fall.

It is of special interest, too, to note that in one case of unresolved pneumonia treated by sensitised pneumobacterins comprising Groups 1 and 2, the mucus and several strains of heterogenous type, a prompt change in the blood picture took place, the leucocytes rising, with a polynuclear increase from seventy-four to ninety per cent., manifested clinically

by a very prompt impress on the consolidated lung, which quickly underwent resolution. Our results also with lobar pneumonia in its active phases have been equally good, but in the acute phase there is often a tremendous increase in the total leucocyte count.

In another paper, which I hope to publish in the near future in collaboration with my associate, Doctor Beckley, we present several infections treated intravenously by serobacterins, with a full exposition both of the clinical and laboratory manifestations.

We now turn to the other phase of the proposition previously stated—that is, the value of bacterin therapy in local and chronic diseases of infectious origin. More unanimity of opinion exists in dealing with this class of cases than prevails with respect to the acute general infections. Wright argued that in the class of conditions now under consideration, time was given for limitation and circumscription of the morbid process. In consequence we do not beget an active immunity, but rather the more strict limitation of the focus and prevention of new foci. He said that we merely attempted to mimic Nature's protective measures. He cited as an instance the local and systemic disturbance which results when a tuberculous joint is too actively manipulated, or when a case of focal tuberculosis is allowed to exercise too much, fever, malaise, sweats, and prostration may result from an excessive antituberculinisation. This he termed a negative phase, based upon the opsonic index. So, too, when a focal, purulent infection is massaged, a negative phase may result. A knowledge of these facts, properly utilised, however, may be turned to therapeutic advantage, as when we strictly limit the amount of effort made in a tuberculous case, being guided by the subjective phenomena and the pulse rate and temperature. So, too, in the employment of bacterins in focal and chronic infections, such as furunculosis, acne, sycosis, impetigo, pyorrhœa alveolaris when emetine fails, or in conjunction with emetine and antiseptic mouth washes, in otitis media, sinus disease, gonorrhœal arthritis, prostatitis, epididymitis, mastoid disease due to common pus organisms or pneumococci, and in infections due to colon bacilli.

For the general practising physician stock cultures have been prepared from many strains. Autogenous bacterins are available only when well equipped laboratories and trained assistants are at hand. The dose also has been determined by the conjoint observations of clinicians and laboratory workers, and the stock product is supplied in proper proportions. The question concerning the greater validity of serobacterins enters also into the treatment of focal infections, but is of less importance than in acute general infections, as the time element is a minor factor. As to whether their intravenous employment will yield more uniform and more satisfactory results I am at this time not qualified to express an opinion.

PRESIDENTIAL ADDRESS TO THE IRISH MEDICAL ASSOCIATION,

June 21st, 1916.

By R. MARLAY BLAKE, M.R.C.P.I., J.P., PRESIDENT.

Gentlemen of the Irish Medical Association, allow me first of all to thank you for the high honour you have done me by raising me to your Presidential Chair for the coming year. It is indeed a great and signal honour to be so selected. An obscure country doctor, you call on me to attempt to fill the chair that Dublin surgeons and physicians of, I might say, European reputation, have so worthily filled in the past. The honour is great, the responsibility is yet greater, and though you have always, as I believe, looked upon me as a hardy, fearless fighter, who never shirked, be the odds never so great, I would remind you that men of my type do not always nor often make diplomatic or discreet leaders. Let us hope that the responsibility cast upon me may develop the qualities necessary for the post. Your President must guide debate; while not interfering with freedom of speech or taking sides in controversy, he should keep a gentle but effectual check on the more ardent spirits—the Ruperts of debate—he should know well your rules and by-laws and the precedents that regulate your proceedings. I have served a long apprenticeship now as a member of Council for many years and as your Deputy-Chairman for the last couple of years. This should help me, and with your loyal co-operation and the assistance of our wise friend Mr. Gick, I may do passably well. Certainly I shall try hard. I have model Presidents in my eye. I have sat under them and have in my time had my ardour gently but firmly suppressed by them. All I ask is that you "be to my faults a little blind, and to my failings something kind," and I have little doubt we shall do something to strengthen, to advance our Association, an object so dear to me and to all of us.

The Reorganisation of the Association.

During the past year we have reorganised, and, as I trust, improved our Association. We have made few drastic changes but many minor ones that, I believe, will render our rules more flexible and more adapted to meet those recent additions to legislation that have affected and, as time goes on, will increasingly affect the Irish medical profession. In recent years three separate attempts were made in this direction. General meetings such as this appointed strong committees of earnest, sensible men. Much valuable time and anxious consideration was given to all debateable points. It is clearly impossible to please everyone. We have had keen critics, and, of course, as usual, the very men who sat most closely on the ditch were the keenest critics of the hurlers in the field. What the cost was in loss of time, fees, patients and sundry expenses to the members of those committees, some of whom came from distant parts of Ireland at great inconvenience—what that cost was it is difficult to estimate. I am sure our best thanks are due and will be rendered by you to those altruistic men.

The Profession and the War.

Gentlemen, in common with the whole nation, we have passed through a most strenuous time, and the strain is not yet relieved. The past year has brought sorrow to the homes of many of us whose gallant sons have given their noble young lives proudly, gladly for the dear land that bore them. We sorrow with them, we share their pride in gallant achievements nobly done. It should be no small source of gratification that many members of our body have answered the call of duty—when did the Irish doctor fail in that?—and are now at home or abroad ministering to the stricken—to our glorious fighting Irish boys, sharing their dangers and their hardships. Some of us, alas! were not found worthy to die for justice and for Ireland. Personally it was a great grief, a sore blow to me to be told I was too old to serve. But those of us who were refused sent our sons, and we are yet available. Have we not seen in our own Capital City how gallant veterans knew how to die?

THE CERTIFICATION QUESTION.

The past year is one to be marked with a white stone in our annals, for it has brought to a successful conclusion our long-drawn-out contest with the Insurance Commissioners, and we are top-dog. The cardinal principle has been definitely conceded that each doctor shall certify for his own patient. On the financial side of the dispute we showed our generosity and our common-sense by conceding and agreeing to a slight diminution in our just demand. Our Association, as I hold, deserves the thanks of the whole profession for our efforts. Our labours are not yet ended: it behoves us to keep a watchful eye on our good friends the Insurance Commissioners lest perchance they filch from us the benefits we wrung from them in open fight. As in the past, through long years, we worked for and safeguarded the interests of our Poor Law brethren, so in the future we shall watchfully and fearlessly watch over your interests not only in Insurance matters, but all those cognate affairs that affect our profession.

THE POOR LAW SERVICE.

Now, sirs, a very large proportion of our members belong to the Poor Law Medical Service, and there are many grievances affecting them yet unredressed. In the fore-front let me put the questions of inadequate pay, and above and beyond all the crying injustice that, after long years of service, we can be thrown upon the world in our old age without an assured pension. The policeman, the gauger, even the downtrodden, underpaid and much sweated national school teacher, is certain of his pension on the Civil Service scale. The poor law doctor alone is left to the contemptuous pity of his masters. The Act says *may* when it should say *must* give. 'Tis but the difference of a word, gentlemen, but how pregnant with meaning and possibilities. Picture to yourself the old doctor, wearied and worn out with hardship, his sight failing, his hearing defective, his feeble limbs scarce able to bear him on his daily rounds. He knows—no one better—that he is out of date, growing daily more and more inefficient; he has lost hope, lost nerve, he dare not face any of the greater emergencies that midwifery so frequently springs upon us when two lives and the welfare of a large family depend on our knowledge of what to do, and our skill and daring to meet the emergency alone, unaided, in a country cabin on the mountain-side miles from help. The poor inevitably suffer but they are merciful and not unmindful of past services. What can the poor man do? He dare not retire; he may be offered as his sole reward the hospitality of the Poor House. This is no fancy sketch, it is living actuality. I personally have witnessed it and vouch for the truth of every word. *Hodie mihi, cras tibi.* Take the most recent instance of the sort. A doctor well known to all of us, Dr. Kelly, of Enniscorthy, after 38 years' service retired. He was voted just £100 a year. Thinking he was entitled to more, he appealed to the Local Government Board. His Guardians were thunderstruck at his audacity, he actually doubted their sense of justice and generosity, he had not licked their boots, and to prove his case for him—if proof were needed—they promptly cut down his pension by one-half. Now, one would have thought his chance of being favourably dealt with was an odds-on chance. Thirty-eight years' service, the ability to meet fearlessly great epidemics of fever on more than one occasion, great personal popularity, a blameless life, of the same religious belief as his masters, the misguided man even went so far as to be described as a "tried and trusty patriot of the real Wexford brand." If that was his fate, what will be that of you and of me? *Ex uno disce omnes.* A very large number of boards of guardians were sensible enough to see in recent years that "good masters begot good servants," and gave us graded scales. The board under which I have the good fortune to serve was one of the first, and I don't think they have lost by it. In this connection I cannot altogether acquit of blame the doctors themselves. I think it was Emerson who said that every country had the laws it deserved to have. *Mutatis mutandis.* I say the doctors have in most instances the guardians they deserve to have. When we see miserable appointments eagerly competed for, all sorts of assistance called in, political, clerical, and even the power of the purse to the extent of two and three years' prospective salary by University graduates and others, what wonder pay does not improve. It is a question of supply and demand, and is governed by general economic laws. I hardly blame the guardians for *sweating* these men.

I am well assured, gentlemen, that once this awful war is over, one of the first questions that will be dealt with is Reform of the Poor Law. The English who, with that overbearing cocksuredness that renders them, in spite of their great qualities, so unpopular, and who always know other people's business better than they themselves do, in the forties of the last century foisted the inhuman degrading Poor Law system on an unwilling Ireland. Saturated as it was with the economic ideas of Cobden and the doctrinaire Manchester school, it possessed every possible fault, extravagance, harshness, inefficiency, and it bred a whole host of leather-legginged despatch-box-bearing officials who still go about preaching economy to the poor while living on the fat of the land themselves.

It speaks well for the intelligence of the country guardians and country doctors that they gradually evolve a *modus vivendi* out of this crude mass of corruption and ineptitude. All will shortly be thrown into the melting-pot. Without trenching on the forbidden topic, politics, it is at least permissible in me to say that we are about to witness, and are witnessing, the rebirth of a nation. Are we not told that this is the day of the apotheosis of small nationalities? Let us be wise and watchful, let us strengthen our Association, let us add to our numbers. Come and join us, you who hitherto merely criticised. We want your brains, we want your help, we want a little, a very little, of your money. Union is strength. Come and join us, help on the good cause, and then, like the prolific man in Scripture, we can talk to our enemy in the gates.

I thank you for your patient hearing.

CORRESPONDENCE.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

UREA AS AN ANTISEPTIC.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The recent discussion of the "discovery" of the antiseptic properties of urea furnishes yet another illustration of the waste of available therapeutic skill and practical adaptation of the same, which inevitably results from the absence of anything like a central reservoir of collective professional knowledge—with carefully scrutinised contributory streams, and re-

ligiously guarded channels of distribution after due filtration through media of absolute reliability. It also represents another example of the general rule that most, if not all, of the neglected "popular" or despised "superstitious" remedies, have, when duly investigated, been found to be quite unwittingly based on a solid groundwork of scientific fact. Thus the native peasantry of the land of Linnæus testified their faith in the sanative powers of *Gaultheria procumbens*, during many generations before the birth of that monarch of botanical science, by the application of a phrase-name which, in English presentation, reads: "Stand up and walk." It also displays an instance of what will, I believe, prove to be one of the established facts of the ultimate clinical record of therapeusis, that: the medicinal agents whose claims have most successfully stood the resistless tests of time and skilled experience are those which owed their discovery to accident, and their application to empirical enterprise.

When a curiously observant boy in my native county of Roscommon, I often watched with special enjoyment the reaper's display of characteristically spasmodic energy in utilising the occasionally favourable spells of fickle harvest weather by the slashingly vigorous use of his reaping-hook. This was not—necessarily—always regulated with all the desirable engineering skill, as a badly hacked left-hand finger often revealed. And under the existing pressure of strenuous conditions, time was so precious as to overshadow the trivial claim of a small *quantum* of flesh and blood. Accordingly, the sufferer swiftly stood up and, turning his back on his fellow-workers, proceeded to micturate on the bleeding surface. When asked the reason, the reply was: "It is the best thing to prevent festering." And the origin of the popular practice would appear to be lost in the shades of antiquity. It has almost surely a genetic relationship with the panaceal claim made for cow's urine: the peasant's "all-flower water"—which contained the essence of all the curative items of the vegetable products of the earth's surface. A widely prevalent item of popular faith in "the good old times" was that a benevolent Providence had actually furnished the specific means of cure, of all the ills to which human flesh is heir, in the tissues and juices of the vegetable products of the respective areas of their endemicity. The idea had been advocated even before the days of Theophrastus and the elder Pliny. It was highly favoured by Miguel Serveto, the discoverer of the pulmonary circulation. And it has been resurrected, in a peculiarly unhealthy form, too—by the latter-day "discoverer" of the specific value of *salicin* in the treatment of rheumatic affections. For, on "looking around" for a characteristic local product of the damp soils on which rheumatism notoriously flourished, that therapeutic seer alighted with telepathic clairvoyance on the mother plant of that organic compound. I may observe, parenthetically, that the "sally-switch" treatment of rheumatism was recommended by Dioscorides, the court physician of Antony and Cleopatra; and was favourably regarded by his encyclopædic Roman commentator, Matthiolus, the "Father of Modern Therapeutics."

The modern tendency—in its characteristic environment of hurry and scurry, and aggressive advertisement, and get-practice-anyway, and "get-rich-quick" (honestly, of course, *if you can*)—has been to save time and space, as well as mentality, while humouring the sense of gustation: by the segregation of the "active principle," the presentation of readable "Directions for Use," and provision of the delectable convenience of transport in minimum of space. I have no doubt that the watery solution of urea will continue to retain its preferential position, but time has laid bare to the observant the facts that neither quinine nor methyl salicylate competently represent the collective curative powers of their respective natural media. But the old therapeutic superstitions will be found, as ever, to die very hard, if at all. They will surely linger along the bye-paths of the tottering march of humanity. I well remember a Roscommon peasant, who had a large and healthy family, every one of whom he always dosed for any and every ailment with copious internal drenches of "all-flower water." And he was by no means one of the lower stratum. He was an educated man—as country education was rated—and of intelligence well above the average. But, as can well be anticipated, he preserved high-handed, as well as high-falutin', ideas of patriarchal government in the household, and never failed to act up to them. It will be readily—as well as truly—guessed that there was little malingering in that family! Then in that great Oriental reservoir of religious conceptions, ceremonies and ordinances, which has from time immemorial been furnished by India, the greatest gift of Providence to the members of the lower castes was the cow. Her milk was the manna sent from heaven, and formed the terrestrial representative of the celestial nectar. And sprinkling with her urine constituted their baptismal purification ceremony, down through all the historic ages; and tens of centuries before. So that the re-discovery of urea, and the rare antiseptic and hygienic value thereof, can cause no surprise to the initiated. I may just mention in conclusion that, after its epoch-making synthesis, urea was a good deal recommended by some enterprising practitioners as a *diuretic!*

I am, sir, etc.,

JOHN KNOTT.

Dublin. June 20th, 1916.

DENTISTRY AND MEDICAL LAW REFORM.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Dentists must be gratified with your full recognition of the fact that dentistry is a legally established branch of the medical profession. The R.C.S., Eng., got power to set up a dental diploma in the Medical Bill of 1858, but it was not till 1878 that the Dentists Act made it obligatory for dentists to have a qualification. The Act soon brought into dentistry a steady supply of practitioners. The education was admirably planned, and no one unless devoid of any handicraftship could fail to come out of the final examination an accomplished dentist. The penal clauses of the Dentists Act were, like those of the Medical Act, soon found inoperative, and the object of the Act to protect the public was entirely done away with. It seems too absurd for credence that the Parliamentary draughtsmen could set up clauses which would be passed by Parliament, and would be entirely useless for the purpose owing to their obscurity and ambiguity. An unqualified man may not style himself dentist, surgeon-dentist, or dental-surgeon, but he can stick up a sign inscribed dentistry or dental surgery, and put such phrases in his advertisements as may lead even educated people to take him for a highly qualified man. This has been lately stated in your pages. The unqualified man is in most cases professionally uneducated; he is a rough mechanic who knows how to take a rough model of a mouth and make artificial teeth. Some of these men are no doubt

unconscious of the mischief they bring about through their ignorance, but there are many advertising quack dentists who are merely out for plunder. The game of these men is to supply artificial teeth very often at exorbitant prices. They entirely neglect the surgical condition of the mouth. When numbers of decayed teeth and broken down stumps are present the first imperative duty is to bring the whole thing into a healthy condition before putting in artificial teeth. This work in dental surgery is laborious and very badly paid. The quack never touches it. He fixes in a denture clasped to remaining teeth which are soon destroyed through this. Beneath the plate there mostly lie broken down stumps in the sockets. These are all in various stages of disease and keep up constant suppuration. This foul matter constantly flows into the mouth and thence into the stomach. Dr. Hunter was the first man to call attention to this source of septic infection and to demonstrate that it was the sole cause of several varieties of systemic disease, many of them progressive and fatal. There are an enormous number of such cases about owing to the increase in the number of quack dentists.

I have already taken up too much space or I might narrate a series of pitiable typical cases which I have encountered in hospital practise—all women.

I am, yours truly,
HOSPITAL DENTIST.

June 21st.

A URINARY TEST OF SYPHILIS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In last week's issue of your valuable journal there appears an article by Dr. C. D. Gray on a new test for syphilis by examination of the urine.

Re No. 1 solution, one is advised to dissolve 1 gm. of iodine in chloroform, but no mention is made of the quantity of chloroform to be used. At a loss, therefore, to know the percentage recommended, I used a 1 per cent. iodine solution, but in every case I have so far only got negative results, even in marked cases of syphilis—as the tendency is to yield too many positives. I feel sure that the fault lies in the strength of the iodine solution. If you could find out the exact strength needed I shall be grateful, as if the test is found reliable we have in our hands a most wonderfully simple and quick method of diagnosis.

I am, Sir, yours truly,
H. C. SAMUEL.

9 Welbeck Street, London.
June 26th, 1916.

[As the author of the paper referred to by our correspondent is resident in the United States, we have written him to favour us with the necessary information.—ED. M.P. and C.]

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

SECTION OF OPHTHALMOLOGY.

MEETING HELD ON WEDNESDAY, JUNE 14TH.

The President, MR. PRIESTLEY SMITH, F.R.C.S., in the Chair.

MR. G. H. POOLEY sent the further notes of a case of "Mikulicz's disease" previously shown. A growth had been removed from the left orbit with some difficulty. Vision in that eye steadily improved for some time, but recently there were signs of return of the disease on the same side, though the scar was free from invasion. The removed material showed the appearance of small round-celled sarcoma.

Dr. F. R. YELLAND showed a patient with loss of visual orientation, following a wound received four months previously. Soon after being put to bed he had a genuine epileptic seizure, and was inaccessible for 14 hours. He afterwards had right hemiplegia, which cleared up later, but he had erroneous visual projection. The condition was now improving.

MR. LESLIE PATON, discussing the foregoing case, drew attention to the similar case under the care of Captain Smith and Colonel Gordon Holmes, reported in the *British Medical Journal* of March, 1916. He gave the results of the tests he had carried out in the present patient. He satisfied himself that the faulty projection was not due to defective eye movements. He believed that there had been complete destruction of the right occipital cortex, the left sensory visual cortex having escaped fairly well. There seemed to have been a complete severance of the superior longitudinal commissural fibres.

Captain CARRUTHERS exhibited a case of "retinitis pigmentosa" of unusual character in a young man who had been a soldier three months. There was no consanguinity, but a younger brother and an older sister suffered from night-blindness, and as this patient could not see to drive when dusk came on, he declared sick, and so came under observation.

The case was discussed by MR. W. LANG, MR. STEPHEN MAYOU, MR. J. B. LAWFORD, the PRESIDENT, and MR. LESLIE PATON.

Captain A. C. HUDSON exhibited, in a tentative form, a giant perimeter, and invited suggestions as to improvement.

Lieut.-Colonel R. H. ELLIOT gave his experiences with a giant perimeter which he had made, and suggested possible improvements.

Dr. A. S. COBBLEDICK read a paper on

FOUR CASES OF PITUITARY TUMOUR.

The cases were all in women, three over 60 years of age. The first case showed a contraction of the visual field of 10 to 20 deg., and a scotoma for colour upwards and outwards from the central fixation point. The colour scotoma bothered her a great deal when reading, and people's faces appeared bluish. There was particular contraction in the temporal half of the field. Later she had Cheyne-Stokes breathing, very violent headache, and became drowsy. The pupils, however, were equal in reaction, and there was no papillitis; the urine was normal. *Post mortem:* a pituitary tumour the size of a walnut was found, and Dr. Buzzard regarded it as a cyst. There seemed to have been sufficient normal gland substance left to ensure normal metabolism during the six years that the symptoms lasted. The second case had right homonymous hemianopia and myxœdema. The memory had become bad, and the speech slurred and indistinct. The family and previous personal histories were good. She had well-marked myxœdema, and there was a lesion of the left optic tract, probably due to pituitary growth. Thyroid extract was given, and there was improvement in the memory and in some numbness which had been present. The appearance of the discs and the constitution of the urine were normal. There was little material change in the patient's condition for three years, but after that there was fairly rapid deterioration of vision, and the nervous

condition increased; there was also vertigo, and flickerings in front of the eyes. Her feet and hands also became larger. Later the symptoms somewhat resembled those of Menière's disease, but there was no deafness nor sickness. Case 3 had optic atrophy, obesity, myxœdema and diabetes. During four years her sight had been gradually changing, and during the last year she had become very sleepy and drowsy. There was no tendency to hemianopia in this case. Her feet and hands were now definitely larger than twelve months ago, and the memory worse. Skiagrams showed an enlarged and lobulated sella Turcica. Operation was declined. He suggested that possibly the diabetes was due to implication of the posterior lobe of the pituitary; or it might be caused by pressure on the medulla. The fourth case was aged 50, and her condition the author diagnosed as early optic atrophy, myxœdema and pituitary tumour. She had defective memory, thinning of the hair, suffocating feelings in the throat, heart attacks, and twelve months ago she was so ill that her life was despaired of. Her discs appeared normal, but the vision for white was contracted in every direction. Skiagrams showed distinct enlargement of the pituitary body, especially at the posterior part. He regarded this as a suitable case for operation.

The paper was discussed by the President, Mr. Leslie Paton, Mr. Stephen Mayou, Mr. Walter Jessop, and Mr. Arnold Lawson, and the author replied.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Obstetrics.

Meeting held May 19th, 1916.

The President, Gibbon FitzGibbon, M.D., F.R.C.P.I., in the Chair.

ROTUNDA REPORTS.

Sir William Smyly read the Rotunda reports.

Sir A. Horne said he wished to congratulate the Governors of the Hospital in granting Dr. Jellett a further extension of leave to serve his country abroad. He noted in the present report that special attention was drawn to the excellent results accomplished in the treatment of eclampsia. He did not think the disease here was milder than elsewhere, but was of opinion that one got cycles of mild and serious cases into hospital. It was important that ante-natal clinics should be attached to all maternity hospitals, so that the toxæmias of pregnancy could be recognised early. He regretted there was no mention of the subject of scopolamine-morphine treatment which occupied so much attention at the present moment in the lay press. He would also like to point out that 30 years ago a former assistant Master of the Rotunda, Dr. Bagot, was the first to perform an abdominal section for the treatment of concealed accidental hæmorrhage.

Dr. Bethel Solomons said that he had modified his views concerning scopolamine-morphine anæsthesia since the publication of Dr. Freeland's paper on the subject in 1909. He thought that "twilight sleep" was unsatisfactory unless the method was carried out by trained assistants and nurses. He noted that two of the patients in the contracted pelvis table were not measured internally. He was aware that the authorities at the Rotunda favoured mensuration by the Skutsch instrument, and he thought it would be a good thing if there was a separate table devoted to Skutsch pelvimetry, as this would draw more attention to its use. Munro Kerr, in his text-book, and also many well-known authorities in England and elsewhere, still insisted that manual measurement of the pelvis was the best. He noted that pituitary extract was given in some cases of accidental hæmorrhage. He wished to know the size of the os when the drug was administered. He inquired the meaning of three cases of hysterotomy in the myomectomy table—whether the hysterotomy was performed for diagnosis according to Deaver's idea?

Dr. Purefoy said he was not an enthusiast for scopolamine-morphine anæsthesia. Amongst the patients who had died of sepsis he recollected that one had not been able to lie down for three weeks prior to admission because of great distress from hydramnios; the labour was slow, pains not ensuing for some days after rupture of the membranes. Her aspect from her admission was that of a woman dying of pernicious anæmia. He was a firm believer in the Skutsch pelvimeter, and regretted that some still relied on the digital method. He thought there was no need for intern pelvimetry in some very obvious cases.

Dr. Rowlette said he thought that in the treatment of puerperal sepsis, both vaccines and sera should be employed. The vaccines should be autogenous, but pending their preparation stock vaccines should be used. The use of these agents did not preclude any other method of treatment which might be considered advisable in a particular case. They were not to be regarded as a cure-all.

Sir William Smyly, in reply, said there had been so many changes in the personnel of the hospital staff during the year that it would be impossible to assign the degree of indebtedness to each member who had helped in compiling it, but Dr. Simpson had done most of the work in preparing the statistics. He was glad that Sir Andrew Horne had called attention to the Master's patriotism in going to France at considerable financial sacrifice, and also to the fact that Dr. Bagot was the first operator who had performed hysterectomy in the treatment of concealed accidental hæmorrhage. Regarding scopolamine-morphine, he had given directions that one dose at least should be given to every patient who was in the first stage of labour, but not that it should be pushed to the degree described as "Twilight Sleep."

BRITISH OTO-LARYNGOLOGICAL SOCIETY.

Meeting held Thursday, June 8th, 1916.

Mr. Charles J. Heath, F.R.C.S., in the Chair.

Motion Regarding Wittenberg Camp. Exhibition of Cases.

In introducing his motion regarding the Wittenberg Camp, the Chairman said:—

Gentlemen, you must all be aware of the terrible outbreak of typhus fever at the Wittenberg Camp for British prisoners of war in Germany. You are also doubtless aware that the circumstances under which it took place were investigated by a Committee presided over by Mr. Justice Younger. The report of that Committee is based mainly upon the evidence of Major Priestley, Captain Vidal, and Captain Lauder, of our Royal Army Medical Corps. These three are the only survivors of the six English surgeons who were sent by the Germans to the camp at Wittenberg, to take up duties which were abandoned by the German surgeons in charge. Such an abandonment of duty by medical men is both astonishing and infamous, and was made no

better when they sent British surgeons to do work which was so dangerous that they were afraid to do it themselves. Such conduct surely implied a lack of courage. There was also a lack of humanity. For while keeping out of danger by staying away from the camp, the German surgeons did not even ensure to it a proper supply of medical equipment, drugs, etc., or of food suitable for the sick. Further, they did not provide adequate clothing for the sick, coal for the fires, or even water for washing. The British surgeons' request for the separation of the sick from the healthy was refused. Dr. Aschenbach, when standing *outside* the wire entanglement which surrounded the camp, was asked by two British surgeons for "some medical requisites urgently needed." The only answer he gave was to call them "English swine." I will now quote from the report of the Younger Commission:—

"On one occasion only during the whole course of the epidemic did Dr. Aschenbach enter the hospital or even the camp. His visit took place about four weeks after Major Priestley's arrival and after some kind of order had been evolved. He came attired in a complete suit of protective clothing, including a mask and rubber gloves. His inspection was brief and rapid. For his services in combating the epidemic Dr. Aschenbach, the Committee understand, has been awarded the Iron Cross."

This inhuman conduct was rewarded! The man came once only during the epidemic, and then came covered with protective clothing. He provided no protective clothing for the British surgeons whom he thrust into the camp to attend the sick. I feel compelled to express astonishment that the medical men of neutral countries have not raised their voices and collectively protested against the conduct of Dr. Aschenbach and his subordinates, for such conduct leaves a stain upon the humane reputation of the medical profession. With these preliminary remarks I beg to move that:

"Notwithstanding the evidence contained in the report of the Bryce Commission regarding the brutality of the combatant branch of the German Army, the Fellows of the British Oto-Laryngological Society did not think it possible that members of the medical profession could have acted as Oberstabsarzt Dr. Aschenbach and other German surgeons did in abandoning the British prisoners of war at Wittenberg Camp during an epidemic of typhus fever. They are not a little surprised that medical opinion on this behaviour has not yet made itself heard in this and in neutral countries."

Dr. FREDERICK SPICER seconded the motion, and said he would have done so with greater satisfaction if it had been more strongly worded, for, after all, the instance referred to in the motion was merely a sample of what occurred daily in the war area. Still, even in its present form, the motion serves to express the sentiment of horror felt by every member of the medical profession in this country, and their thanks were due to Mr. Charles Heath for having brought the matter forward. It is time something was done to remove a disgraceful anomaly—that is, the perpetuation on the Roll of Honour of our medical societies of the names of representatives of a country which perpetrated and tolerated such vile and brutal acts. He thought the various learned societies of the country, not only the medical, but those of chemistry, law and others, should also take action and officially express the detestation which is felt and expressed all over the country at the crimes committed by Germany. There was no room for sentiment in the face of such brutal acts. To do less than he had suggested was almost as bad as toleration of brute force.

Dr. CHARLES W. CHAPMAN desired, as a visitor, to strongly endorse the resolution; he thought members of the profession could not speak too plainly on the matter.

Mr. G. W. DAWSON also supported the resolution, and in doing so said he could not understand the German doctors not attending patients suffering from typhus fever. Dr. Aschenbach need not have been so nervous about his own health, as very few healthy people contracted it. The German doctors seemed to be ignorant as to the degree of contagiousness of typhus fever.

Dr. COUBRO POTTER desired also to associate himself with the resolution. He was certainly of opinion that now was the time to act. At another medical meeting recently, when a similar resolution was discussed, some of the speakers said the time had not yet arrived when any such resolution should be passed, that the proper time for that was after the war. That seemed to him a great mistake, for if the war should last a considerable time, were such acts to continue to be tolerated? If neutral countries were to see the record of the passing of this resolution, they might feel induced to do something on the same lines. Though mildly worded and less strong than some of the Fellows might have wished, it was in the right direction.

Dr. PENNY also supported the resolution, and agreed that if it had been made more severe it could not have been out of place. It was in the nature of a protest, and he agreed in making a signal protest against the whole German nation.

Dr. LOOSELY associated himself, as a visitor, with the resolution. The sooner the action of Germans towards our countrymen who were prisoners in their hands was called combined attention to, the better for the prisoners still there. He was ready to give all the support he could to such a scheme.

Dr. G. F. LONGBOTHAM (Middlesbrough) supported the motion, and asked whether any steps of a similar nature had been taken by other societies.

Dr. C. K. MOSELEY (Ipswich) expressed his cordial sympathy with the motion. He did not know why the resolution expressed surprise that medical opinion in neutral countries had not made itself felt concerning this behaviour in Germany. He thought an inclusion should be made of the medical opinion in this country, which had not proved as strong as it might be. In fact, except at a recent medical meeting, at which it was vetoed, there had been scarcely any medical expression of detestation. It would be impossible to make the wording of this resolution too strong.

The CHAIRMAN, in reply, said that if the press censor in Germany allowed the truth to come out, medical black sheep, such as those at Wittenberg, might be condemned by the Germans themselves. This resolution, if passed, might lead to others. He thought, particularly, that the medical profession in the United States should have protested. The other neutral countries were relatively so weak that they could be brow-beaten.

The resolution was carried unanimously.

DISCUSSION ON CASES, ETC.

Dr. FREDERICK SPICER'S cases: (1) A case of bradycardia, or slow action of the heart, in a boy, æt 15. He showed the patient because of the danger of operation in such conditions. On arranging for a nasal operation, it was stated that there was something wrong with the heart, for which he had been under the care of Dr. Charles Chapman years before. He communicated with Dr. Chapman, whose reply was, that bradycardia existed and rendered an operation dangerous. Dr. Chapman treated the boy for six months, and then saw Dr. Loosely, the anæsthetist, before anæsthetic was

given. The operation was carried out at a nursing home, every precaution having been taken to be ready for any emergency which might arise. The turbinals were removed, and there was not much bleeding. Suddenly, at the end of the operation, the heart and breathing stopped, and he thought the patient was dead. Artificial respiration, however, revived him. This was such a remarkable fulfilment of Dr. Chapman's fears, that he went round to see him in order to learn more about it, as he did not want to run such risks if they could be avoided.

Dr. CHARLES W. CHAPMAN (who attended the meeting as Dr. Spicer's guest) said his habitual attitude was not alarmist. He did not think every case of heart trouble contra-indicated operation. There were some, however, in which operation was more than ordinarily risky, and this he regarded as one of them. He saw the patient when five years of age at the Hospital for Diseases of the Heart. He had been cyanotic since birth. He gave many other details of the case, which was considered to be one of congenital heart disease. He described the case at length, also the means of settling the question of heart block by the inequality of the pulsations of the ventricle and auricle.

The case was discussed by Dr. COUBRO POTTER and by Dr. LOOSELY, who gave the anæsthetic at the operation, and was on his guard at the time, having been warned of the risks. He said that after the recovery from the attack at the operation there were some slighter attacks.

Dr. MOSELEY also discussed the case.

II. Dr. SPICER brought forward this case to illustrate what he regarded as the best method of removing malignant growth from the naso-pharynx, *viz.*, to perform a preliminary laryngotomy, split the soft palate and hold the portions apart.

Mr. CHARLES HEATH showed I. a case of catarrhal deafness. On one side the hearing had been improved by treatment, on the other by disease. One ear had been painted with a solution of cantharidine after his method with good results, the other had been the seat of acute otitis media, perforation and discharge for five days. The improvement in hearing resulting from the abscess was remarkable.

This case was discussed by Dr. SPICER, Dr. PENNY, Dr. MOSELEY and Dr. COUBRO POTTER.

Mr. HEATH, in reply, pointed out that if paracusis were well marked the hearing of the majority of these cases could be improved. They practically all had indications of obstructive deafness. He was not yet satisfied with his method of treatment because it did not relieve every case, but he was satisfied that it was far more effective than any other which had yet been devised. Some of the cases he had treated five years ago still had excellent hearing.

II. A case in which follicular tonsillitis occurred when the Eustachian tube became patent after a mastoid operation by the exhibitor's conservative method. Mr. Heath explained the mechanism by which the throat was involved. He pointed out that the syndrome was fairly common, viz., conservative mastoid operation, clearing of the Eustachian tube, and follicular tonsillitis. He had seen four cases of it in the last month.

Dr. FREDERICK SPICER thought Mr. Heath's explanation was a likely one; he had not seen it mentioned elsewhere.

III. A case of patching up a deaf ear which had been irreparably damaged by suppuration of over 30 years' duration. Though cure was impossible the life was made safe and the hearing good by the conservative mastoid operation.

IV. A case of aural suppuration of 13 years' duration in which the frequent occurrence of pain led to the performance of the conservative mastoid operation.

This patient, a Lieutenant in the R.A.M.C., had undergone treatment for years without effect. Since the operation, which took place four weeks before the meeting, the perforation had healed and the hearing considerably improved.

V. A case of aural suppuration lasting forty years, in which vertigo recently developed. The vertigo was cured and the hearing restored by the conservative mastoid operation. Patient's age was 66.

SPECIAL REPORTS.

LOCAL GOVERNMENT BOARD REPORTS ON CEREBRO-SPINAL FEVER (*a*).

THE Local Government Board has issued a valuable and comprehensive series of "Reports on Cerebro-spinal Fever." Dr. A. Eastwood reports on the bacteriological aspects of the carrier problem; Dr. F. Griffith, on identification of the meningococcus in the naso-pharynx; Dr. W. M. Scott, on meningococci occurring in the spinal fluid and the naso-pharynx; Dr. R. J. Reece, on the epidemic prevalence of the disease in England and Wales in the first six months of 1915; and Dr. Bruce Low on the prevalence and distribution during recent years.

It will be seen that all these subjects are of prime importance to the bacteriologist or the sanitarian, and each author has treated his subject fully and with careful references to previous work. We can only refer here to a few points of interest. Dr. Eastwood, basing his opinion on a careful study of the morphological, cultural and serological reactions of the meningococcus as obtained from various sources, comes to the practical conclusion that all naso-pharyngeal strains which answer to the recognised culture tests are to be regarded as capable of producing cerebro-spinal fever. An identical conclusion is come to, chiefly on serological grounds, by Dr. Griffith. Dr. Scott investigated a number of cases of the disease, and compared the organisms separated from the spinal canal with those separated from the naso-pharynx. He found that the maximum period during which meningococci may be isolated from the naso-pharynx of convalescents exceeds three months. The meningococci isolated from the naso-pharynx in seven cases of the disease were identical with those isolated from the spinal fluid of the same patients. Micro-organisms indistinguishable from meningococci by microscopical and cultural methods were found in 22 per cent. of 138 persons, non-contacts, from an urban population. No opinion is expressed on the point, but the facts we have quoted support the view that meningococcal infection is a fairly widespread condition of which meningitis is only a rare accompaniment.

THE MENTALLY DEFECTIVE.

AT the conference on sanitary administration under war conditions, held on June 10th, at the Royal Sanitary Institute, a discussion took place on the Mental Deficiency Act.

Dr. A. B. Ritchie (Medical Officer, Manchester Education Committee) spoke of the great need for schools for backward children with supervision before the issue of certificates. There was no

(*a*) "Reports to the Local Government Board on Public Health and Medical Subjects." New Series, No. 110. London: H.M. Stationery Office. 1916. Price 2s.

advantage in keeping defective children at ordinary education after the age of 14; the next two years should be given to industrial training.

Mr. Leslie Scott, K.C., M.P., who presided, said that special schools should educate children capable of becoming self-supporting citizens. The lower-grade cases should be cared for by the Poor Law authorities, and should have training with a view to permanent supervision and assistance. A result of the war was suspension of loans for institutions, though need for them was great; there was a dearth of doctors; and local authorities were hampered by depletion of staffs. For these reasons the working of the Act was difficult, but everything possible towards carrying out its intention should be done. Educational authorities would find scope for useful work in ascertaining the number of mentally defective children within their districts, and the lists should differentiate those that were educable from those that were not. The workhouse was not an ideal institution for the purpose, but with certain conditions use could be made of it during the war.

The Rev. J. Darmody (Wolverhampton) urged that local authorities should never send a case to an institution without full knowledge and frequent inspection. He maintained that there were many institutions utterly unfit for the treatment of the mentally defective.

The Chairman asked that the names of such institutions should be given to him in confidence.

ANOTHER MEDICAL V.C.

IN a supplement to the "London Gazette" issued on June 21st, it is announced that the King has been pleased to award the Victoria Cross to Captain John Alexander Sinton, M.B., I.M.S., for most conspicuous bravery and devotion to duty. Although shot through both arms and through the side, he refused to go to hospital, and remained, as long as daylight lasted, attending to his duties under very heavy fire. In three previous actions Captain Sinton displayed the utmost bravery.

THE EGYPTIAN CAMPAIGN.

IN despatches received from General Sir John Maxwell and Major-General Sir A. Wilson, dealing with the military operations in Egypt from November, 1914, to March, 1916, reference is made to the work of the 137th Field Ambulance:—

Major R. M. Knox, I.M.S., and his officers were energetic and expeditious in the disposal of the large number of wounded on their hands.

The names of the following medical officers are mentioned:—

STAFF, ETC.

Lieut.-Col. H. Burton, C.I.E., I.M.S., Major J. D. Graham, I.M.S., Capt. S. W. Jones, I.M.S., Lieut.-Col. (temp. Col.) W. H. B. Robinson, C.B., I.M.S., Lieut.-Col. Sir D. Semple, Dir.-General of Dept. of Public Health, Dr. J. Creswell, i/c Govt. Hosp., Suez; Dr. W. C. Hayward, i/c. Govt. Hosp., Port Said; Major G. W. Heron, R.A.M.C., Health Off., Suez Canal Area; Dr. L. Camboliu, Med. Off. Suez Canal Co., Ismailia; Lieut.-Col. E. P. Sewell, R.A.M.C., A.D.M.S.; Surg.-Major and Hon. Surg. Lieut.-Col. R. Bullock, T.D.; Surg.-Gen. R. W. Ford, C.B., D.S.O., D.M.S.; Col. T. B. Beach, A.M.S.; Surg.-Major B. Pares, D.S.O.; Major H. V. Bagshawe, R.A.M.C., A.D.M.S.; Lieut.-Col. Sir J. Rogers, K.C.M.G., D.S.O., A.M.S.; Maj. C. S. Spong, D.S.O.,; Local Major W. Hastings; Local Major E. V. Oulton; Local Major A. F. MacCallan; Local Major W. Hayward; Local Major C. Ekins; Local Major L. P. Phillips; H. V. Keatinge, C.M.G.; J. E. Cresswell; Armand Ruffer, C.M.G.; A. Granville.

MEDICAL SERVICES, A.M.S., AND R.A.M.C.

Lieut.-Col. W. G. Pridmore, C.M.G., I.M.S., No. 5 Ind. Genl. Hosp.; Lieut.-Col. J. B. Smith, I.M.S., Bombay Pres. Genl. Hosp.; Lieut.-Col. P. J. Lumsden, I.M.S., No. 8 Ind. Genl. Hosp., Cairo; Major T. B. Kelly, I.M.S., 105th Ind. Fd. Amb.; Major W. R. Battye, D.S.O., I.M.S., 108th Ind. Fd., Amb.; Maj. W. D. Ritchie, I.M.S.; Capt. R. H. Bharucha, I.M.S.; Major J. N. Walker, I.M.S., 108th Ind. Fd. Amb.; Capt. C. H. Fielding, I.M.S., 89th Punjabis; Col. C. W. R. Healey; Col. F. W. G. G. Hall; Temp. Col. F. D. Bird; Lieut. Col. O. L. Robinson; Lieut.-Col. H. E. R. James, C.B.; Major J. M. Darling; Major A. N. Fraser; Major C. P. Thomson; Temp. Major C. C. Choyce; Temp. Major W. T. Prout, C.M.G.; Capt. R. E. Todd; Capt. H. W. Carson; Capt. E. C. Lambkin; Capt. W. W. Treves; Capt. C. Robb; Capt. S. W. M. Jones (Spec. Res.); Capt. E. J. Bradley (Spec. Res.); Temp. Capt. G. Blacker; Temp. Capt. S. A. Boyd; Temp. Lieut. J. G. Willmore; Lieut.-Col. A. H. Lister, 1st Scot. Genl. Hosp.; Capt. E. W. H. Groves, 2nd Southern Genl. Hosp.; Capt. D. G. Kennard; Capt. C. Carr, 1st Scot. Genl. Hosp.; Capt. W. R. Douglas, E. Lancs. Div. Fd. Amb.; Lieut. (temp. Capt.) G. R. Rickett; Lieut.-Col. (temp. Col.) C. Stonham, C.M.G. (deceased); Lt.-Col. (temp. Col.) A. H. Tubby; Major (temp. Col.) A. W. Mayo Robson, C.V.O.; Capt. (temp. Col.) V. W. Low; Capt. (temp. Col.) Sir V. A. H. Horsley Lieut.-Col. A. R. Tweedie; Lieut.-Col. T. H. Forrest; Major C. P. Thomson; Capt. W. A. Brechin; Capt. G. E. J. A. Robinson; Major (temp. Lieut.-Col.) F. H. Francis.

AUSTRALIAN AND NEW ZEALAND FORCES.

Major and Hon. Lieut.-Col. J. G. Tedder, Australian A.M.C.; Col. (Hon. Surg.-Gen.) W. D. C. Williams, C.B.; Lieut.-Col. G. T. Hall, N.Z.A.M.C.; Temp. Lieut. J. W. O'Brien, 1st Aust. Div. Train.

CANADIAN A.M.C.

Lieut.-Col. F. Hetherington, C.M.G.; Lieut.-Col. H. R. Duff (deceased); Capt. G. E. Kidd.

THE CAMPAIGN IN GERMAN EAST AFRICA.

In a despatch received from Lieut.-General Smuts, Commander-in-Chief of the East African Force, dated April 30th, 1916, and dealing with the British campaign in East Africa, the following reference is made:—

"Exceptionally heavy work has been thrown upon medical officers and *personnel*. All wounded have been treated and evacuated expeditiously, and the number of sick who passed daily through the hands of the medical authorities, more especially since the cessation of active operations, has been very great. Great credit is due to Surg.-General G. D. Hunter, C.M.G., D.S.O., and his assistants.

MEDICAL REWARDS FOR GALLANTRY.

D.S.O.

HIS MAJESTY THE KING has been graciously pleased to approve of the appointment of the undermentioned officers to be Companions of the Distinguished Service Order, in recognition of their gallantry and devotion to duty in the field. The specific acts for which the rewards have been granted will be announced as soon as possible in the *London Gazette*:—

Temp. Capt. Walter Dawson, M.B., R.A.M.C.

Capt. William Archibald Miller, M.B., R.A.M.C., Spec Res. (attd. 22nd Royal Fusiliers).

Military Cross.

His Majesty the King has been graciously pleased to confer the Military Cross on the undermentioned Officers and Warrant Officers, in recognition of their gallantry and devotion to duty in the field :—

Temp. Capt. Frederick Chas. Atkinson-Fleming, M.B., R.A.M.C. (attd. 8th Royal Inniskillin Fusiliers, for conspicuous gallantry and devotion to duty when tending casualties during and subsequent to a hostile attack. He worked without ceasing under difficult and dangerous conditions.

Temp. Lieut. Francis Keene Marriott, R.A.M.C. (attd. Headquarters, 182nd Field Artillery Brigade), for conspicuous gallantry and devotion to duty when he went out to tend the wounded of two batteries which were under heavy shell fire.

The following have also been awarded the Military Cross. The specific acts for which the awards have been granted will be announced as soon as possible in the *London Gazette* :—

Temp. Capt. Cyril Mary Brophy, R.A.M.C. (attd. 18th London Rifles, T.F.).

Capt. John Arthur Cullum, Canadian A.M.C. (attd. 28th Infantry).

Temp. Capt. John Meir MacKenzie, M.B., R.A.M.C., (attd. 6th Northumberland Fusiliers, T.F.).

Capt. William Hunter Riddell, M.B., Indian Medical Service.

Temp. Lieut. Charles Cyril Okell, No. 6 Field Amb., R.A.M.C.

LITERARY NOTES.

From Messrs. John Wright and Sons, Ltd., Bristol, comes the 15th edition of Mrs. J. Langton Hewer's "Our Baby for Mothers and Nurses." (1s. 6d. net stiff boards; 2s. 6d. net limp leather.) No words of ours are necessary to commend a book which has met with such decided success. The advice given is sound and practical, and we have pleasure in calling attention to this new edition, which has evidently been very thoroughly revised.

* * *

Mr. James Berry, F.R.C.S., Senior Surgeon to the Royal Free Hospital, who, with his wife, Dr. Frances Berry, proceeded to Serbia last year in medical charge of the Red Cross Mission to that unhappy country, has a book in the press entitled "The Story of a Red Cross Unit in Serbia," which deals with the recent history and the aims of the Serbs, as well as with the exciting travelling and other experiences of the mission, the establishing of hospitals, sanitation, and the treatment of a severe epidemic of typhus. It tells of the Austrian invasion and shows how the unit fell into the hands of the enemy. The volume is illustrated by photographs taken by various members of the party, and will be published by Messrs. J. and A. Churchill.

* * *

We have received a copy of "An Every Day Directory for War Time," issued by the Women's Imperial Health Association and Women's Emergency Corps. It contains information regarding the numerous bodies and institutions engaged in work connected with the war. For example, it gives the names and addresses of those ladies who forward clothes and comforts to British Prisoners of War in Germany, and gives the address of the Belgian Labour Exchange which finds employment for Belgians and supplies workers as desired. The booklet, which is published at 6d., should prove very useful.

* * *

We have received a copy of an admirable pamphlet compiled by the Association of Infant Welfare and Maternity Centres, entitled "To Wives and Mothers," and published by the National League for Physical Education and Improvement, price 3d. The advice is well chosen and simply expressed, while stress is appropriately laid upon the most important subjects. A short and practical account of the hygiene of pregnancy, with a list of the preparations necessary for confinement, is followed by detailed instructions for breast feeding and bottle feeding and the general management of the infant. We are glad to see an entire page devoted to the condemnation of baby "comforters." After some useful hints on the management of older children, a few of their common ailments are dealt with in detail—diarrhœa, measles, whooping cough, etc. Some simple cookery recipes are introduced, and the last few pages are occupied with general instructions as to cleanliness and ventilation. The most striking points about this pamphlet are the entire absence of any confusing or complicated directions, and the continued appeal to common sense whereby hygienic living is presented as an attractive and attainable mode of life.

* * *

The *British Journal of Surgery* (John Wright and Sons, Bristol) continues to maintain the high level of surgical journalism with which it started. A considerable portion of the later issues, as is only to be expected, has been devoted to some of the graver surgical problems of the European war. In the current issue (Vol. III., No. 12), such questions as the prognosis and treatment of gunshot injuries of the femur, cranium, and thorax receive prolonged consideration. Major Hey Groves, who has been a pioneer worker in the modern treatment of fractures, opens with an illuminating account of the difficulties to be met with in treating severe gunshot fractures of the femur. From an extensive experience, he lays down the cardinal precept: Early immobilisation, which shall not interfere with dressings; such immobilisation is best carried out by a wire cradle splint on the principle of the double-inclined plane; extension should be applied once the flesh wounds are in a healthy condition, and it is best carried out by means of a transfixion pin, as the wounds of the soft parts do not readily lend themselves to the older methods of using adhesive plaster for the purpose. In his experience, good results are obtained in 74 per cent. of cases, a satisfactory percentage, when one considers the amount of sepsis and comminution caused by modern missiles. Surgeon-General Sir A. Bowlby puts the primary mortality at the clearing station as high as 14 per cent., initial shock and collapse, hæmorrhage, gas gangrene, and the presence of other injuries caused by shell fire all constituting very grave factors in the prognosis. Primary amputation was necessary in 6 per cent. or 7 per cent. of cases, being usually called for at the casualty station on account of severe laceration of main vessels, comminution of condyles with involvement of the knee joint, or extensive destruction of soft parts. In the presence of grave sepsis, or gas gangrene, the traditional methods of amputation have not, in many cases, given the expected results; in such cases the "flapless" method of Fitzmaurice Kelly would appear to be of distinct value. "*Autres temps autres mœurs*"—and surgeons who are unable to see for themselves conditions as they actually are behind the battle line should not be too hasty in their criticisms of newer and, perhaps, revolutionary methods of treatment for these ghastly wounds of limbs, thorax, or cranium, devised by the men actually on the spot. For men serving in base hospitals at home, we can imagine no more instructive reading than this journal. One of the most attractive features of earlier issues was the graphic account by some "Eye-witness," luckier than his fellows, of visits to famous cliniques abroad. Might it be possible that some contributor could give us a peep at the actual work of some of the famous surgeons of our Allies, and their methods of treatment of similar problems to those under discussion?

Willesden Council marriage-rate last year was the highest and the birth-rate the lowest for more than 40 years. The birth-rate is now only 22 per 1,000 of the population, compared with 44 in 1875.

SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

Specially compiled for THE MEDICAL PRESS AND CIRCULAR.

Treatment of Acute Yellow Atrophy of the Liver.—Longridge (*R.A.M.C. Jnl.*, June, 1916) records the case of a soldier who reported sick in Gallipoli on October 1st, and was admitted to the Giza Hospital, Egypt, on October 10th, 1915. The patient complained of feeling sick, had some pains in his legs and loss of appetite. There was slight jaundice, the bowels were acting normally, his temperature was 99.6° F., and his pulse normal. Three days later the patient was deeply jaundiced, the stools were clay-coloured, and the urine mahogany colour. The patient then became very ill, with severe epigastric pain with occasional fainting attacks, and some vomiting. Examination of the urine showed that it contained besides bile considerable quantities of leucin and tyrosin, the patient's temperature being subnormal and his pulse seventy. On October 15th the patient was delirious, vomiting bilious fluid, and he was passing some blood by the bowel. Some diminution in the liver dulness was noted. Injections of glucose solution were given to the patient per rectum, and one hundred cubic centimetres of a two per cent. solution of sodium bicarbonate solution were injected hypodermically night and morning. The patient was considered to be suffering from acute yellow atrophy of the liver, and Colonel William Hunter, who saw the patient, agreed with the diagnosis. On October 18th the patient was much better, was passing considerable quantities of urine, which still contained leucin and tyrosin, but no albumin or sugar. The patient made a slow but uninterrupted recovery, the liver dulness again becoming normal. Longridge states "the atrophy is an acute autolytic degeneration of the liver, a process which is much more rapid in an acid than in an alkaline medium, and therefore demands a free administration of alkali to bring about its arrest. It is closely akin to what occurs in certain cases of eclampsia, in which, I believe, I was the first to point out a marked diminution of the alkalinity of the blood (estimated by Wright's method). In these cases of eclampsia I have learned to regard as an ominous symptom complaint of pain in the epigastrium, such as this patient had." K.

Nephritis without Albuminuria.—Parkinson (*Brit. Jnl. of Children's Diseases*, May, 1916) records the case of a boy, aged three and one half years, who was admitted to hospital suffering from acute pneumonia. A fortnight later the boy's chest was normal and he appeared quite well. During his illnes his urine did not show anything abnormal. Just fourteen days after admission to hospital slight œdema appeared on the boy's face, and on the following day there was general anasarca of the body and limbs. The child became very ill and stupid, and a blood pressure of 90 mm. was recorded. No trace of albumin was ever found in the urine, though on microscopic examination granular and hyaline casts with a few red blood corpuscles were found. The boy made a good recovery, and was discharged from hospital in perfect health. Parkinson believes that the "child had an attack of acute nephritis, following but not due to pneumonia, causing œdema and the presence of casts and blood cells in the urine, but without albuminuria." The condition seems to be more common in scarlatinal nephritis than in nephritis from other causes, and in one case, seen by Dr. J. D. Rolleston, the existence of the acute nephritis was verified by *post-mortem* examination. K.

Inoculation of Man with Mixed Vaccines containing Bacillus Typhosus. B. Paratyphosus A, and B. Paratyphosus B. Coppinger and Gibson (*R.A.M.C. Jnl.*, May, 1916) record some experiments made with vaccines containing these organisms with the view of determining the reaction produced and the antibody formation. From these experiments they draw the following conclusions:—"(1) That the highest dosage used is the best for producing lasting antibodies against these three organisms, and that the vaccine should be given in two doses rather than one, both on account of the reaction produced by the single dose of one cubic centimetre, and also on account of the higher antibody content produced when the two doses are given. (2) The want of antibody production for bacillus paratyphosus A is a very strong feature of these experiments when compared with those elaborated for bacillus typhosus and bacillus paratyphosus B. As to the immunity produced against this organism, that can only be decided by actual trial, but the results obtained in the course of these experiments seem to point to the fact that the bacillus paratyphosus A content of the vaccine may not achieve its object to the same extent as that of bacillus typhosus and bacillus paratyphosus B." K.

Trench Foot.—Waller and Rideal (*R.A.M.C. Jnl.*, May, 1916) in a report of investigations on the condition known as "trench foot" make the following suggestion for treatment. A salted ointment, such as salted lard, should be used for protecting the foot against water. The salt would further act as an antiseptic. A liberal amount of ointment is necessary, as much as one hundred grammes for each leg, with five or ten per cent. salt. The writers point out "that officers' spiral puttees contract five to six per cent. of their length when they are soaked in water." K.

Delivery by the Natural Passages after Cæsarean Section.—Williams (*Amer. Jnl. Obs.*, lxxiii., 3) asks, in the absence of disproportion between the fœtus and pelvis, may a patient, after Cæsarean section, safely be allowed to go into labour and be delivered by the natural passage? To answer this, experiments were made to determine the strength of scars in animals. The reported cases of rupture were analysed and subsequent histories of patients were investigated. Analysis of the reported cases of rupture showed thinning of the scar in practically every case, some due to infection, others to lack of care in suturing. The following conclusions are drawn:—A carefully sutured and well united scar will withstand any strain that can be endured by uterine muscle. Rupture is always secondary to unusual weakness of the scar dependent on imperfect consolidation, most frequently due to failure to include the whole thickness of the muscle in the sutures or having them too far apart; infection in certain cases. Therefore it seems evident that given a uterus which has been sutured with care, and where there has been no sepsis during convalescence, labour may be gone through without risk when there is no disproportion in fœtus and pelvis. F.

The Indications for Cæsarean Section.—Boyd (*Amer. Jnl. Obs.*, lxxiii., 4) says that the procedure is now more and more frequently resorted to for relative indications, and even in some cases for the child's life alone. In pelvic deformity in a large group of cases it is impossible to determine the right treatment prior to the onset of labour, as a disproportion often disappears after a careful test, and unless this test is made many needless sections will be performed. Avoidance of infection is the chief need in making the test of labour,

for it is infection rather than the length of labour, even after rupture of the membranes, which makes the case a bad surgical risk. As long as the ætiology of eclampsia is obscure its treatment by section is questionable, and in the majority of cases manual dilatation with forceps or version will be the better treatment. Placenta prævia is considered a very questionable if ever justifiable indication, and many sections appear to the author to be indefensible. Those now advocating Cæsarean section for placenta prævia, eclampsia, etc., must bear the culpability for the deaths which may result from uterine rupture at a later time. F.

Morphine and Scopolamine in Gynæcological Operations.—Morrison (*Amer. Jnl. Obs.*, lxxiii., 3) reports his finding in fifty cases in which injections of morphine and scopolamine were given to a degree of complete narcosis. Injections of respectively 1-6th and 1-100th to 1-50th of a grain were given and repeated in half an hour, repetition being continued until the narcosis was complete. If the respiration was slowed and the pupil contracted without complete narcosis, scopolamine was continued, while if there was restlessness and the face was red scopolamine was discontinued and morphia given. After two injections, if narcosis was not complete at the end of half an hour, but there was evidence of the action of scopolamine, an injection of apomorphine, 1-10th to 1-20th of a grain was given. This often produced an apparent effort by the patient to vomit, and then complete narcosis set in. Narcosis took from one to two and a half hours to complete, and then lasted after the operation for five to nine hours. It appears to be very deep. Respiration is slowed to about twelve per minute, and there is complete relaxation. There is risk of the tongue falling back. The after effects are satisfactory, and the patients appear to be comfortable and well. F.

The Cause of Carcinoma.—Rockey (*Surg., Gyn. and Obs.*, xxii., 2) says that it is only where long-continued or repeated irritation destroys the basement membrane and unduly stimulates a defensive karyokinesis, that the adjacent mesoblastic and epiblastic cells lose their antagonism for each other and mingle, that the invasion of the mesoblastic tissues by immature epiblastic cells takes place, and a cancer is formed. The theory is drawn from the fact that certain cancers develop from evident chronic irritations, which may be of great variety—thermic, traumatic, radiant, or chemical. The only common condition present in all cancers is a defensive reaction on the part of the cells, first manifest in the production of new cells. F.

Wassermann Reaction in Obstetrics.—Commiskey (*Amer. Jnl. Obs.*, lxxiii., 4) examined 1822 women and 1074 infants. Eight per cent. of the mothers gave positive results, and eleven mothers who gave negative reactions had children who gave either positive or doubtful reactions. Eighty-two per cent. of the women with positive reactions had no history or evidence of disease. The previous history of the positive cases showed that 33 per cent. of the multiparæ had previous abortions, miscarriages, or still births, but this is only 3 per cent. higher than an equal number of negative women. The number of cases followed up afterwards was few, but in these there was found to be some variation in the findings from the original findings. The findings in infants would appear to be irregular, but generally negative, irrespective of the findings in the mother, and might remain so for years. The death-rate amongst children in the first ten days of life was found to be four times as great in those of Wassermann positive mothers than when the mother and child were negative. F.

Captain (temporary Major) J. Innes, M.B., Highland Casualty Clearing Station, has relinquished his commission on account of ill-health. Major Innes is a well-known Aberdeen doctor.

OBITUARY.

DEPUTY SURGEON-GENERAL EDWARD MALCOLM SINCLAIR, LONDON.

DEPUTY SURGEON-GENERAL EDWARD MALCOLM SINCLAIR died in London on June 14th, aged 84 years. A son of Dr. Martin Sinclair, of Edinburgh, he qualified M.R.C.S.Eng. and M.D.St. Andrews in 1853, and entered the Army Medical Service the following year. In the Crimean war he was at the siege and fall of Sebastopol, receiving the medal with clasp and the Turkish medal. He also served through the Indian Mutiny, taking part in several actions, and being present at the siege and capture of Lucknow. In the Transvaal campaign of 1881 he was Principal Medical Officer on the lines of communications and the base, and for his valuable services he was mentioned in despatches. General Sinclair retired in 1888.

DR. J. H. DAVIS, M.B., Ch.B., LIVERPOOL.

DR. J. H. DAVIS, of Liverpool, who was severely injured in a collision with a tramcar in St. Mary's Road, Garston, died on June 21st at Garston Hospital, as a result of his injuries. Dr. Davis, who was fifty-one years of age, was educated at Queen's College, Belfast, and qualified M.B., B.Ch., B.A.O., R.U.I., in 1899. He was a well-known practitioner in Liverpool, and was a lieutenant in the R.A.M.C. and senior medical officer at Reading Military Hospital.

DR. GEORGE BARNES, L.R.C.P., M.R.C.S., L.S.A., BRIDGWATER.

THE death has occurred of Dr. George Barnes, at the age of 81 years. Educated at Charing Cross Hospital, he qualified M.R.C.S. Eng. in 1856, L.S.A. in 1858, and L.R.C.P. Edin. in 1860. He was formerly M.O.H. for the Chard District, and physician to the N. Staffs Infirmary.

LABORATORY NOTES.

"MARTINDALE" TABLETS THYROID GLAND. (W. MARTINDALE, LONDON, W.)

THESE tablets are issued in two strengths—1½ gr. and 5 gr.; *i.e.*, they are stated to contain respectively 1½ gr. and 5 gr. of standardised thyroideum siccum. The method of standardisation, we take it, is by estimation of the iodine content. The products afford a suitable means of administration of thyroid when doses of 1½ gr. or more are prescribed.

LYSOL BRITISH MADE. (LYSOL, LTD., 9-10, ST. MARY-AT-HILL, E.C.)

WE have received a sample of "L" Brand Lysol manufactured by the above firm. It is stated to be equal in every respect to the German product, except that, owing to the great demand, the British Lysol has not been allowed to mature. Like the enemy-made substance, "L" Brand Lysol is miscible in chloroform, alcohol or glycerine without becoming cloudy or turbid. It contains a constant 50 per cent. of free cresols. In the manufacture, pure caustic potash is used and the correct percentage of soap is ensured. Our experience is that "L" Brand Lysol is an effective antiseptic, which can be used in all cases where in pre-war days the German product was employed.

MEDICAL NEWS IN BRIEF.

National Medical Union.

THE annual meeting of the National Medical Union was held at the offices, 346, Strand, on June 24th. It was reported that about one-third of the members were engaged on war service, and several of them had gained distinctions. Dr. V. T. Greenyer, who occupied the chair, explained a scheme prepared by him for a medical service for the genuinely necessitous classes of the community. A resolution from the Edin-

burgh Medical Guild was adopted in favour of allowing any insured person who makes personal application to make his own arrangements with any registered medical practitioner willing to attend him.

Dr. Alexander Morison presided at the dinner held at the Café Monico. Proposing the toast of "The National Medical Union," he said their desire and hope was that the National Insurance Act should fail even more than it had already done. The Union had continued to justify its existence by assisting non-panel practitioners. Dr. Greenyer, who responded, said the Union was continuing to fight disinterestedly for the freedom and honour of the medical profession. He thought the Government had at last thoroughly found out, to their dissatisfaction, that they had been trying to carry out a function which they were not able to perform, and which they ought never to have attempted, the result being failure. The individual bargaining by the Government with the practitioner was a fraud. The Union intended to make it plain to the Government that they would have to come to the medical profession to get the work done properly. Dr. H. B. Greene observed that, while it was no use flogging a dead horse, it was important to remove the carcase, so that it could do no harm. That was what would happen to the Insurance Act. Dr. G. D. Wilson proposed "The Scottish Medical Guild," and Dr. Frederick Porter made acknowledgment.

Objections to Doctors' Capitation Grant.

Stirlingshire Insurance Committee at Stirling on June 22nd adopted a resolution expressing the opinion that the payment to medical practitioners of a capitation fee of 6d. per person for the attendance and treatment of insured persons who have been recommended by insurance committees for sanatorium benefit (domiciliary treatment) should be discontinued, and that steps should be taken to have the remuneration of medical practitioners made dependent upon the actual attendance and treatment given. Figures were submitted showing that the amount paid to doctors in the area in respect of this domiciliary 6d. was £731 in 1913, £716 in 1914, and £654 in 1915, while the sums which would have been approximately due to them for these years on the basis of a payment by fees at 2s. 6d. per visit for two visits per week per insured person were respectively £45, £66, and £42. The practitioners actually attending domiciliary cases numbered 11 in 1913, 12 in 1914, 11 in 1915, out of 80 on the panel list.

The Sale of Cocaine.

In the House of Commons on June 22nd, Mr. Herbert Samuel, answering Colonel Norton-Griffiths, said: "The sale of cocaine to members of his Majesty's Forces has been made an offence by order of the Army Council under Regulation 40 of the Defence of the Realm Regulations. Under the Acts governing the sale of poisons cocaine can only be sold by registered chemists to persons known or introduced to them, and after entering in the poisons book the particulars required by the schedule to the Act of 1868. I am considering what further action should be taken.

Mr. Herbert Samuel, replying to a question by Sir R. Cooper about the sale of pick-me-ups containing ether and cocaine in West End shops, said that *coca liquidum,* being a preparation of coca, was covered by the recent order of the Army Council This substance was, moreover, in Part II. of the Schedule to the Poisons and Pharmacy Act, 1908, and was therefore subject to the restrictions as to sale laid down in the Poisons and Pharmacy Acts. Ether was not a poison within the meaning of these Acts.

Motor Ambulance Gifts.

The King inspected at Buckingham Palace on June 24th a convoy of motor ambulance cars purchased with part of the £40,000 subscribed by the members of Lloyd's and presented to the French Army, through the British Ambulance Committee.

The convoy includes 20 ambulances, two reserve ambulances, one light lorry, one travelling workshop, and one staff car, and is intended to take the place of Ambulance Section No. 2, which has done excellent work on the French line since December, 1914. It will operate behind the lines at Verdun. The sum subscribed not only covers the cost of the two convoys, but also their maintenance for 18 months. One ambulance and the staff car are the gift of Mr. Herbert Austin, of the firm by whom the whole were built.

As the convoy entered the Palace grounds about 11 o'clock it was cheered by a large crowd which had collected, and M. Paul Cambon, the French Ambassador, who was present, acknowledged the compliment. The cars were driven past the King, who stopped and made a close inspection of the travelling repair-shop. He afterwards expressed his confidence that the convoy would prove of great service and wished all belonging to the party Godspeed.

Another convoy, purchased by the British Sportsmen's Motor Ambulance Fund was inspected on Saturday by Queen Alexandra in the grounds of Marlborough House, and was afterwards handed over to the Wounded Allies Relief Committee and to the Sir Arthur Du Cros Ambulance Convoy.

Combating Venereal Disease.

Dr. Matthew Hay has written the Public Health Committee of the Aberdeen Town Council as follows:—"In view of the desirability of making more ample provision within the city for dealing with venereal diseases, the serious effects of which on the health of the nation, and especially of urban communities, and perhaps more particularly of seaport towns, is emphasised in the recent report of the Royal Commission, and in view also of the undertaking recently given by the Government that the Imperial Treasury is willing to bear three-fourths of the expenditure which any local authority may incur in making provision for the diagnosis and treatment of these diseases—both diagnosis and treatment requiring in many cases the use of methods that cannot be easily carried out by the ordinary medical practitioner—I beg to suggest to the committee that they recommend to the Town Council that a remit be made to the committee to prepare, for the consideration of the Council, such a scheme for dealing with venereal diseases as will meet with the approval of the Imperial authorities, and entitle the Council to receive the promised Government contribution."

Walsall Infantile Mortality.

Alderman C. C. Walker, chairman of the Health Committee, pointed out at a meeting of Walsall Town Council, on June 19th, that the annual health report showed that the rate of infantile mortality last year rose from 115 to 149 per 1,000 births. It was admittedly a serious matter, though the increase had been general throughout the country. It had been thought that as people in Walsall had been earning good wages an opposite condition of things would have existed. The only explanation of the increase which could be given was that women had been extensively employed in the factories of the town. He expressed the hope that the Council would see its way to appoint more lady health visitors.

Dr. Layton said if mothers could be educated in feeding their children useful service would be done. He agreed that one of the crying needs of the day was for decent houses for the working-class population.

The Mayor expressed a hope that the establishment of a Child Welfare Society would prove of value. Already over 100 voluntary workers had been enrolled as members.

Sheffield Infirmary Needs.

The great need of additional income to enable the Sheffield Royal Infirmary to carry on its valuable work efficiently was emphasised by Mr. H. H. Bedford, who presided over the general quarterly Board of Governors, held on June 21st.

The Chairman said he would like to mention the great work the Royal Infirmary was doing, free of all cost to the State, for the wounded soldiers of the country. Since the annual meeting in April nearly

200 soldiers had been admitted, including many long and serious cases.

The increase in the price of almost every commodity was sending up the expenditure by leaps and bounds. Two items, meat and milk, would cost this year nearly £1,500 more than last year, while the total expenditure for the year was estimated at nearly £25,000. There were, he said, many firms who did not subscribe towards the upkeep of the institution. There surely could be no more suitable recognition than that of having one's private or trading name enrolled on the list of annual subscribers.

The Chairman also referred to the excellent services rendered by the Royal Infirmary staff, and particularly by the members of the honorary medical staff. The staff, though depleted by the military necessities, was rendering in a time of great stress yeoman service to the institution. It gave him pleasure to acknowledge the help the Royal Infirmary had received since the annual meeting from a generous donor. The gift had come at a very opportune moment, and the Board were deeply grateful.

Medicinal Herbs.

LECTURING on medicinal herbs at Caxton Hall, Westminster, Mr. E. M. Holmes, of the Pharmaceutical Society, suggested that large landowners should lay out their lands for the cultivation of herbs and plants, so as to retain in this country a trade which, before the war, was largely in the hands of Germany and America.

"Horse Pickling" in London.

THE Essex Appeal Tribunal has granted conditional exemption to a horse slaughterer, in support of whose claim it was stated that horses had now to be pole-axed, as bullets for the "humane killer" were unobtainable.

An inspector of the Royal Society for the Prevention of Cruelty to Animals said that there were more crippled horses in London now than before the war, the reason being that the best horses had been taken for the Army. At the present time, too, horses were not sent abroad as formerly; they were killed and "pickled" in London, and he had had a large number of prosecutions against people who caused lame animals to travel. The appellant did a large amount of slaughtering for the society.

The South African Hospital.

THE South African Military Hospital has just been officially handed over to the War Office.

The hospital, which is a model institution in every way, for situation, roomy buildings, and modern equipment, holds 304 beds, and its entire cost was defrayed by the South African community in this country. The completion is chiefly due to Sir Lionel Earle, Secretary to the Office of Works, who obtained the King's sanction for the site in Richmond Park, to Mr. Allison, the architect, and to the engineer, Mr. McFerran, all of whom gave their services.

Colonel Stock and a capable staff of South African nurses are in charge, and it is stated that patients will very shortly be received.

New Clinic for Disabled Soldiers.

ON July 3, at 126, Great Portland-street, W., there will be opened a "Physical Clinic" for the treatment of wounded and disabled soldiers. The object of this clinic is the treatment of stiffness following wounds and also of various types of disablement. Good results have been obtained in these conditions at the Grand Palais Hospital in Paris, notably with the *eau courant*, or whirlpool bath.

The whirlpool bath will be an important part in the treatment to be carried on at the new Physical Clinic. The bath has lately undergone a rather interesting development, and is expected to achieve important results. The excellent service it has already rendered in France makes it possible to look forward to a time when the deformities now so frequently met with in soldiers with healed wounds may be mitigated if not cured.

The British Red Cross Society are taking an active interest in the clinic. It is expected that a number of doctors will view the installation this week.

Chemical Society and Alien Enemies.

AT the adjourned extraordinary general meeting of the Chemical Society, held at Burlington House, on June 21st, the following resolution was carried:—

"The Chemical Society considers that it is neither compatible nor consistent with its loyalty to the Crown, whence the Royal Charter under which it works was derived, to retain any alien enemies upon its list of Honorary and Foreign Members. It is, therefore, resolved that the names of A. von Baeyer, T. Curtius, E. Fischer, C. Graebe, P. H. R. von Groth, W. Nernst, W. Ostwald, O. Wallach, and R. Willstatter, who were elected under happier conditions in recognition of their eminent services to chemical science—for which the society still holds an undiminished appreciation and regard—be, and they are hereby, removed from the list of Honorary and Foreign Members.

Birkenhead's Ambulance.

THE "Birkenhead" ambulance, built as the outcome of the generous response to a Mayoral fund, is a handsome car, equipped to take both seated and stretcher cases, and cost about £500. It is so arranged that four lying-down cases can be carried at one time, or either or both pairs of stretcher supports can be lifted out of position, thus allowing the whole or part of the accommodation to be used by men whose injuries do not debar them from standing or sitting. Conspicuously on the slate-grey coloured sides are painted the name of the ambulance and the arms of the borough. The vehicle makes a useful addition to the already big fleet of motor ambulances available for Red Cross work in Birkenhead.

Scholarship for Liverpool University.

DR. NATHANIEL EDWARD ROBERTS, M.B., C.M., of Y Craig, Menai Bridge, Anglesey, formerly of Liverpool, medical practitioner, some time assistant medical officer of the Port of Liverpool, who died on February 19, leaving estate valued at £11,890, with net personalty £11,796, left an immediate legacy of £500 to the Chancellor of Liverpool University for the benefit of the university, and another £1,000 for the endowment of a scholarship in the department of Infectious Diseases, payable on the death of a niece.

The late Sir Joseph Fayrer and Falmouth.

AT the last meeting of the Falmouth Town Council it was reported that the family of the late Sir Joseph Fayrer had presented a handsome marble bust of their father to the Town Council. It was decided to place the bust in the council chamber, one of the members remarking that no one had done more to make public the natural gifts of Falmouth than the late Sir Joseph Fayrer.

Effects of War.—Dundee Royal Lunatic Asylum.

THE annual report of Dr. Mackenzie, the Medical Superintendent, was submitted at the 96th annual meeting of the Dundee Royal Lunatic Asylum, held on June 19th.

At the date of the last annual report, the Medical Superintendent stated, 70 patients were resident in Gowrie House—28 men and 42 women. During the year 15 patients had been admitted—9 males and 6 females—and 14 patients had been discharged, 3 males and 11 females. Of these, 13 had been discharged as recovered, and 8 had died. The total number under treatment during the year was 87, and the number remaining at the present date was 63—29 men and 34 women. Alcohol was the cause of breakdown in four instances, physical shock was responsible for two cases, and three were due to hereditary causes.

Society of Apothecaries of London.

THE following candidates having passed the necessary examinations, have been granted the L.S.A. diploma of the Society, entitling them to practise medicine, surgery and midwifery:—H. Archer, H. N. Eccles, E. D. G. Murray, and M. B. M. Tweed.

NOTICES TO CORRESPONDENTS, BREVITIES, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

LETTERS TO THE EDITOR and Original Papers intended for publication should be written on one side of the paper only, and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of bona fides. These should be addressed to the Editor at the Offices of this Journal; if in Ireland, to the Dublin Office, 29 Nassau Street; from other parts of the United Kingdom, these should be addressed to the London Office, 8 Henrietta Street, Strand.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s., post free at home or abroad.

Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada. For South Africa, The Record Publishing Co., Cape Town. Messrs. Geo. Robertson and Co., of Sydney and Melbourne, are our special agents for Australia.

EXEMPTION BECAUSE OF NOSE.

EXEMPTION has been granted by the Middlesex Appeal Tribunal to a man who is an expert in a business which requires an extraordinary power of smell.

It was stated that the man had a marvellous "nose."

SPINSTERS AS HEALTH VISITORS.

ONE of the arguments used at the Islington Borough Council against the appointment of health visitors to assist in the cause of child welfare was the possibility of spinsters being appointed to instruct married women in the duties of motherhood.

IN CELLAR COOL!

THE population of Rheims now includes only 4,110 children. These children have been to day school in the cellars under shell-fire for nearly two years.

The other day a French composition was set to a class in the Joffre School, and the subject chosen by the master was "Narrative of this morning's bombardment."

WAR INSANITY.

IN his annual report to the governors of the Cumberland County Asylum, Dr. Farquharson stated that the war had had no special effect upon the incidence of insanity in that part of the country.

J. L. (Co. Mayo).—The microscope you describe is a very good one, and should be very suitable. The mechanical stage is a convenience, but not a necessity. The Thoma-Zeiss hæmocytometer is by far the most convenient and trustworthy.

"CHAIR" DAY.

For the Earl of Beaconsfield's Memorial Cottage Hospital, Wycombe had a "chair" day on June 24, a miniature specimen of the town's industry being worn.

CHILDREN AND VENEREAL DISEASE.

THE Local Government Board have asked the Metropolitan Asylums Board to undertake the control of children suffering from venereal disease. It is stated that the City guardians have offered accommodation.

DR. CHAS. CROSS.—The gentleman referred to is not on *The Medical Register;* probably you have made a mistake in the name or initials. We suggest that you look up afresh your reference, and we will help you on hearing again.

MARGARINE FOR BUTTER.

THE Blakewell (Derbyshire) Board of Guardians have decided to substitute margarine for butter in the workhouse dietary. Several guardians stated that they had "sampled" both, and were unable to detect any difference.

DR. A. S. (Royaumont).—The book referred to is in the hands of the reviewer.

THE WIDOW'S MITE.

THE Camberwell Guardians have received the following letter from a workhouse inmate:—"Dear Gentlemen,—Will you please accept the widow's mite to help you mend the wounded soldiers that come home to you here, and tell them they are not forgotten. I have saved a penny a week for two years. I have enclosed 9s.—I am, yours obediently, J. D." The widow has been thanked and the money sent to the Red Cross Fund.

FOOD RINGS.

MR. WILLIAM LAWTON, Secretary of the Society of Medical Officers of Health, will lecture at the Prince's Skating Rink on June 28th, his subject being "Markets, Food Rings and Marketing."

Vacancies.

South Devon and East Cornwall Hospital, Plymouth.—House Physician. Salary £150 per annum, with board, residence, and washing. Applications to P. J. Langdon, Secretary.

London Temperance Hospital, Hampstead Road, N.W.—Assistant Resident Medical Officer. Salary £120 a year, with residence, board, and laundry. Applications to the Secretary.

Bolton Infirmary and Dispensary.—Third House Surgeon. Salary £180 per annum, with apartments, board, and attendance. Applications to Albert E. Briscoe, Secretary.

Derbyshire Royal Infirmary, Derby.—House Surgeon. Salary £200 per annum, with board, residence, etc. Applications to E. Forster, Secretary.

Bolingbroke Hospital, Wandsworth Common, S.W.—Resident Medical Officer. Salary £300 per annum, with board-residence and laundry. Applications to the Secretary, Medical Committee.

Bolingbroke Hospital, Wandsworth Common, S.W.—House Surgeon. Salary £200 per annum, with board-residence and laundry. Applications to the Secretary, Medical Committee.

Appointments.

DONALD, C. W., M.D., F.R.C.S.Edin., Honorary Physician to the Cumberland Infirmary, Carlisle.

LAUDER, HELEN, L.R.C.P. & S.Edin., L.F.P.S.Glasg., School Medical Officer at Hyde.

SIBBALD, IAN GRAHAM, M.B., C.M.Edin., Medical Officer of Health for the Crewkerne (Somerset) Urban District Council.

Births.

CANNEY.—On June 20th, at 33 Buckland Crescent, Hampstead, the wife of Major Leigh Canney, R.A.M.C., of a daughter.

ELLIS.—On June 15th, at 47 Wheeleys-road, Edgbaston, Birmingham, the wife of F. W. Ellis, Lt.-Col., R.A.M.C. (T.), of a son.

FISON.—On June 18th, at Lawnswood, Wigmore, Chatham, the wife of James Fison, Surgeon, R.N., of twin sons.

HALL.—On June 20th, at 29, Brunswick Square, Hove, the wife of Donald G. Hall, Major, R.A.M.C. (T.F.), 2nd Eastern General Hospital, Brighton—a daughter.

LEA-WILSON.—On June 20th, at the residence of her mother, 57 Beauchamp Avenue, Leamington Spa, the wife of Capt. B. Lea-Wilson, R.A.M.C., of a son.

MARRACK.—On June 23rd, at Roseville, Bigwood Road, Golder's Green, the wife of Captain John R. Marrack, R.A.M.C., of a son.

MAYOU.—On June 24th, at 14 Ridinghouse Street, W., the wife of M. S. Mayou, F.R.C.S., of a daughter.

MUIR.—On June 15th, at Sunfields, Healing, Lincs, the wife of Surgeon G. D. Muir, R.N., of a daughter.

STYLES.—On June 12th, at a nursing home, 5 St. Mark's Square, Regent's Park, N.W., to Captain W. V. T. Styles, R.A.M.C., and Mrs. Styles (*neé* Minna Phillips)—a daughter.

WILSON-STUART.—On June 15th, at Tanbridge House, Avenue Elmers, Surbiton, the wife of F. Wilson-Stuart, M.D., Ch.M., of a daughter.

Marriages.

BELL—NAIRN.—On June 21st, at St. John's Presbyterian Church, South Kensington, Major Frederick Charles Bell, C.A.M.C., Canadian Contingent, eldest son of Charles N. Bell, LL.D., and Mrs. Bell, Winnipeg, to Dorothy Gladys, only daughter of Mr. and Mrs. John Nairn, Winnipeg.

BOSTOCK—JAMES.—On June 6th, at the Church of S. Peter, Port, Guernsey, Eustace Bernard Bostock, M.D., son of the late Thomas Bostock, Langdale, Stafford, and Mrs. Bostock, Burwash, Sussex, to Olive, daughter of the late John James, Merthyr Tydfil.

BROWNFIELD—MACKENZIE-HUGHES.—On June 16th, at St. Jude's Church, Southsea, Surgeon Owen Deane Brownfield, R.N., H.M.S. *Chester*, eldest son of Dr. and Mrs. Brownfield, of Petersfield, to Mary (Baby), youngest daughter of Colonel E. W. Mackenzie-Hughes, Priory Court, Hampstead.

CAMPBELL—GALLAGHER.—On June 19th, at St. Peter-in-Chains, Stroud Green, Lieutenant George A. Campbell, R.A.M.C., son of Mr. and Mrs. J. Campbell, Belfast, to Sara (Cissie), eldest daughter of Sir William and Lady Gallagher.

CROWTHER—WOODLEY.—On June 14th, at Emmanuel Church, Plymouth, Captain Charles Rowland Crowther, R.A.M.C., son of the late James Addington Crowther, of Bryn Tirion, Mannamead, Plymouth, to Kathleen Olive Mary, daughter of the late George W. A. Woodley, of Stonehenge, Natal, and niece of Mr. and Mrs. Woodley, of Evadne, Mannamead, Plymouth.

DICKSON—BARTON.—On June 22nd, at S. Nicholas's Church, Sutton, Surrey, Captain Kenneth Bruce Dickson, R.A.M.C., to Mildred, daughter of the late Mr. Frank Barton, of Holmwood, Sutton.

SHELLEY—RASHLEIGH.—On June 17th, at St. Matthias's, Earl's Court, Capt. L. W. Shelley, R.A.M.C., to Beryl Marie Rashleigh.

Deaths.

CHURCHILL.—On June 22nd, at 4, Cranley Gardens, S.W., Frederick Churchill, M.D., F.R.C.S., youngest son of the late John Churchill, J.P., of Oakfield, Wimbledon, in his 74th year.

RUBEL.—On June 21st, at Dover, John Leopold Rubel, M.R.C.S., L.R.C.P., aged 60.

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GERSTS

Medical press and circular